

A man with brown hair and a beard, wearing a grey suit jacket, a light blue shirt, and a dark blue tie, is smiling and looking down at a smartphone in his left hand. He is also holding a white coffee cup with a gold-colored pattern in his right hand. The background is a blurred outdoor setting, possibly a city street.

MED<sup>9</sup>EL

# GETTING CONNECTED

With Assistive Listening Devices

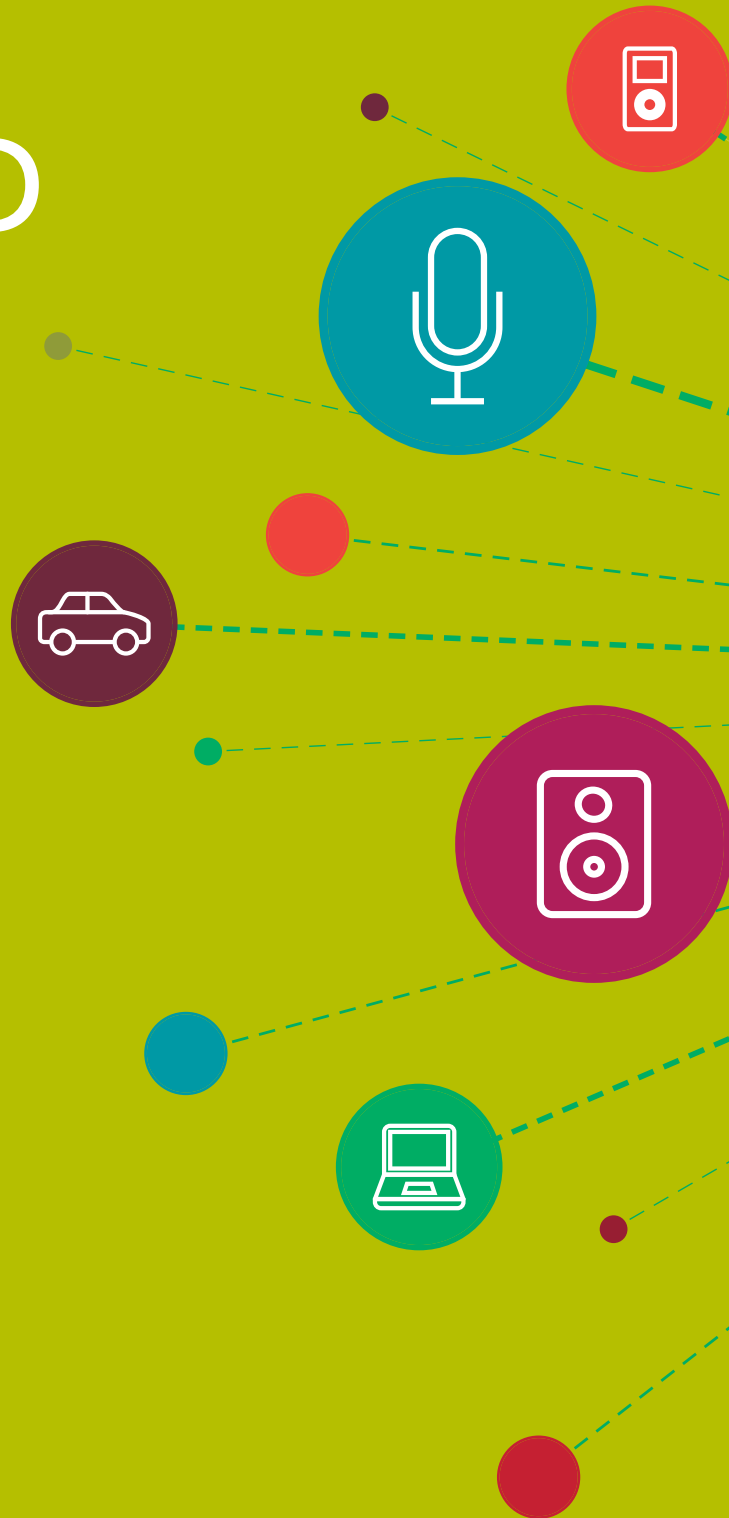
hearLIFE

# CONNECTING TO A WORLD OF SOUND

Talk on the phone, listen to music, and take part in the conversation—even in busy restaurants or on the road. MED-EL audio processors can connect directly to audio sources through easy-to-use accessories for exceptional sound quality. These assistive listening devices (ALDs) are an excellent way to reduce background noise and improve sound quality anywhere you go.

In this guide, we'll go through a simple overview of assistive listening devices, and how you can easily connect them to your MED-EL audio processor. Then we'll take a look at ways you can begin using ALDs in your everyday life.

## READY TO GET STARTED?







**High-quality, direct audio streams straight to your processors.** Through AudioLink and compatibility with third-party digital systems, MED-EL offers the best solutions for every listening environment.

## DIGITAL WIRELESS STREAMING



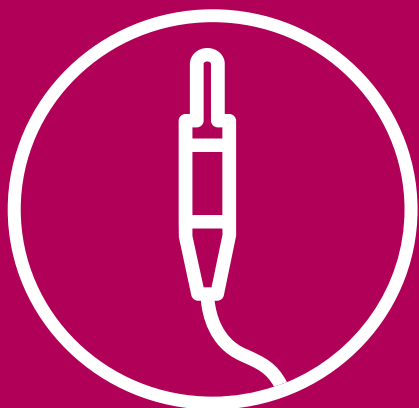
**Sync up to your Bluetooth device** - a tablet, computer or smartphone - with your MED-EL processor for clear, hands-free listening.

## BLUETOOTH CONNECTIVITY



The integrated telecoil in your processors can provide **wireless connectivity at the touch of a button**. Telecoil can be used in venues or homes with induction loop systems, or via personal accessories like neckloops.

## STATE-OF-THE-ART TELECOIL



A 3-pronged euro port makes the MED-EL processors **compatible with many third-party systems** (including *Phonak, Oticon, and Williams Sound*). Many users already own an FM system for their hearing aids, and can readily use them with their new MED-EL processors!

## DIRECT AUDIO INPUT





# DIGITAL WIRELESS STREAMING



Send the sound right to your ears, even across a busy room. With a digital wireless system, you can stream sound from a microphone directly to your audio processor. This technology is perfect for reducing background noise, making it much easier to listen to a person speak – up to 100 feet away!

**+ Advantages:**

- Wireless connection
- Clear listening with remote microphone
- Long-range streaming

**✓ Ideal for:**

- Attending meetings
- Listening to a speaker
- Having conversations in noisy settings
- Easier listening in the classroom, in the car, or at home
- Hands-free phone use
- Audio streaming with TVs and entertainment devices



MED-EL AudioLink

MED-EL is also fully compatible with Roger™ products such as Roger Pen or Roger Select



Roger™ Pen



Roger™ Select

# USING AUDIOLINK™ (Digital Wireless System)

AudioLink is an easy-to-use universal connectivity device that can connect SONNET or SONNET 2 to your phone, tablet, TV, and all your other favorite media devices. It features easy access to controls, various mixing modes for optimal listening, wideband audio Bluetooth for cell phone use, TV connectivity and an audio input for multimedia use.

One-touch Bluetooth instantly connects you to your phone or tablet

Various mixing modes for listening in a variety of environments

Easy to access volume controls

Remote microphone for listening in large rooms, noisy situations or meetings

Clear, digital sound is wirelessly streamed from the Audiolink directly to your SONNET.



SONNET with Roger 21

A variety of Roger transmitters and receivers are compatible with MED-EL processors.



Roger Pen and Roger Select



Roger MyLink telecoil neckloop







For classrooms

Digital wireless systems provide many ways to connect in different listening environments.

Use it at home, at work or in class.

Sync the transmitter to your phone via Bluetooth for clear, hands-free listening.

Use a docking accessory to stream audio from a TV directly to your processor.

Stream music and audio from a phone, tablet or computer.



For office meetings



Hands-free phone calls



Wireless streaming from TV



# CONNECTING WITH BLUETOOTH





Just about every entertainment device now uses Bluetooth technology. With a Bluetooth accessory, you can enjoy high-quality digital sound directly from a compatible device. You can also easily pair your phone to a Bluetooth neckloop for clear phone calls and wireless audio streaming.

**+ Advantages:**

- Wireless connection
- Short-range streaming
- Compatible with most Bluetooth devices

**✓ Ideal for:**

- Hands-free phone use
- Audio streaming with TVs and entertainment devices

Examples of devices that use Bluetooth include smartphones, tablets, and computers





# STATE-OF-THE-ART TELECOIL



All-in-one connectivity at your fingertips. Your audio processor has built-in telecoil technology, which sends sound wirelessly to your audio processors. At the touch of a button, you can wirelessly connect to hearing loops in public spaces or at home. You can easily connect your phone or tablet to a neckloop for clear phone calls or wireless audio streaming. All you need is your FineTuner Echo Remote Control to activate telecoil and you'll be automatically connected to whatever you are listening to!

+ Advantages:

- Wireless connectivity
- Bluetooth compatible
- One-touch activation

✓ Ideal for:

- Making phone calls
- Watching/listening on entertainment devices like tablets and computers
- Watching TV/home theater
- Public venues

Telecoil function



FineTuner Echo Remote Control



# USING TELECOIL

A telecoil is a special circuit inside the audio processor designed to pick up electromagnetic signals. These magnetic signals - or induction signals - are wirelessly transmitted to the audio processor using a neckloop, silhouette, or induction loop system.

A **neckloop** is a looped wire worn comfortably around the neck which transmits signals to the processor.



neckloop

A **silhouette** is an ear-level telecoil device, which is placed on the ear, next to the audio processor.



silhouette

An **induction loop system** is a large-area accessory. A thin wire is placed around the listening area and is connected to a special amplifier where sound signals are circulated through the loop wire.

**TIP**

M: Microphone T: Telecoil only  
 MT: Microphone and Telecoil together

These functions are independent of all other processor settings and can be used with any program selection, volume, or sensitivity setting.



To activate the audio processor's telecoil (while using a neckloop, silhouette, or loop system), "T" or "MT" settings are selected to gain direct access to the incoming sound.

There are a variety of telecoil devices to choose from. Basic telecoil products connect via cables that can plug into any audio device with a standard headphone jack. Bluetooth models provide a wireless connection (without the cable) and are used with compatible bluetooth devices (tablets, smartphones, etc.)

You can easily use telecoils without any accessory worn around the neck. If you are inside of an induction loop system, you can simply activate the telecoil on your processor and hear the audio from the event/speaker wirelessly... and clearly! (See *Induction Loop Setup*, page 26)



Basic Neckloop

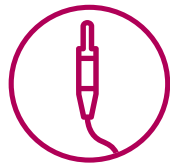


Bluetooth Neckloop



# DIRECT AUDIO INPUT





Plug right into the sound. With a direct audio input (DAI) cable, you can plug your audio processor directly into any audio source with a standard 3.5 mm headphone jack. The direct connection eliminates background noise and interference, so you can enjoy high-fidelity audio from any device with a headphone jack.

Another option with the universal DAI sleeve is that you can connect most 3rd party FM mini-receivers to your MED-EL processor.

**+ Advantages:**

- Plug & play
- Clearest sound quality
- Connects to nearly any audio device

**✓ Ideal for:**

- Listening to music
- Connecting to portable devices (tablet, phone, etc.)





## USING DAI

Direct Audio Input (DAI) is a feature on MED-EL cochlear audio processors which allows an external source to be directly connected as input, bypassing the microphone. For example: tablets, telephones, computers, or assistive listening devices (ALD) can be directly connected to the processor(s).

MED-EL provides an option for an **FM Battery Pack Cover** designed with a standard "euro port" (three small holes) which provides the DAI connection. By using an **audio cable**, you can plug directly into an audio device and hear clearly. This is a great alternative connection for users who may experience interference issues with telecoil. For FM users, this port allows for the connection of an **ear-level wireless receiver** which pairs with the FM system's transmitter for a wireless connection. Once the transmitter is activated, the audio processor will automatically receive the sound signal.



Connecting an audio cable



FM Battery Pack Cover with ear-level wireless receiver. MED-EL users can connect with ANY FM system that has a mini-receiver with standard 3-pin configuration

**TIP**

The Mini Battery Pack also uses the standard 3-pin port that is compatible with many **ear-level wireless receivers** and used with audio cables. It can be used with both the SONNET and RONDO Audio Processors.



RONDO 2 connected to the Mini Battery Pack





MED-EL offers audio cables compatible with most devices equipped with a standard headphone jack (tablets, computers, smartphones, FM systems, etc.).

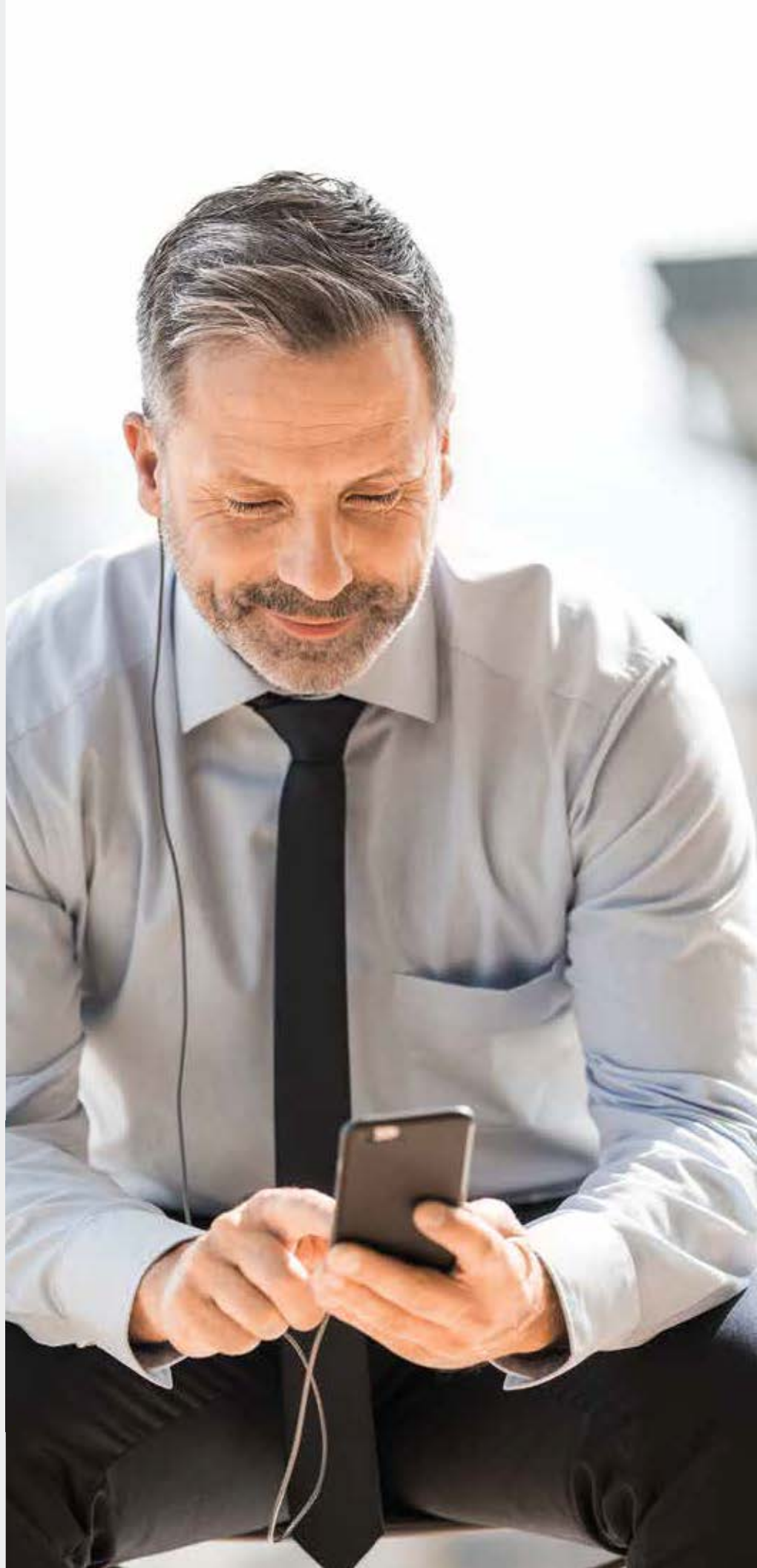
**Mixing Cable (Yellow Plug):**

Provides balanced sound input from both the audio processor's microphone (environment) and the external audio device.

**External Cable (Red Plug):**

Provides *maximum* sound input from the external audio device with *minimal* input from the audio processor's microphone (environment).

*Audio cables are also available in bilateral configurations (for use with two processors at the same time).*





# USING HEADPHONES



Since cochlear implants do not have feedback issues that are prevalent in hearing aids, many cochlear implant users have been enjoying listening with regular headphones. Large, “over-the-ear” headphones work best, as they fit right over your audio processors for a comfortable listening experience.

With the hi-fidelity microphones in MED-EL processors, you can be sure to enjoy your music library, movie streams, and video chats as they are meant to be enjoyed.

#### ✓ Ideal for:

- Watching movies while traveling (i.e., airplanes)
- Streaming videos on tablets
- Listening to music
- Using telephone for hands-free operation



# USING THE FINETUNER ECHO

FOR USE WITH SONNET AND SONNET 2



Your phone can do many things, and now it can connect to your audio processor too! With the **AudioKey** app, you can change settings, locate your audio processor, and check your hearing stats—all directly from your phone.

# KEYS ON THE FINETUNER ECHO



## Program Selection Key

Toggles between four different processor programs. These programs are determined by your audiologist.



## Volume Keys

Two keys to increase or decrease overall loudness. You can increase and decrease volume to the maximum and minimum volume set by your audiologist.



## Input Key

Toggles between three settings to activate the microphone (M), the telecoil (T) or the microphone and telecoil together (MT) as the signal source. These settings are independent of all other processor settings and can be used with any program selection (1,2,3, or 4), volume, or sensitivity setting.



## Audio Stream Key

Stops/starts an active external audio stream (i.e. from AudioLink)



## Default Key

This key sets volume and microphone sensitivity to pre-defined values determined by the audiologist. (NOTE: It does not reset programs)



## Sensitivity Keys

Two keys to increase or decrease the microphone's sensitivity. Increasing sensitivity brings in more environmental sounds, while decreasing sensitivity focuses more on sounds closest to the user.



## Lock Key

Locks/unlocks the keypad on the FineTuner Echo



## Processor Keys (for bilateral users)

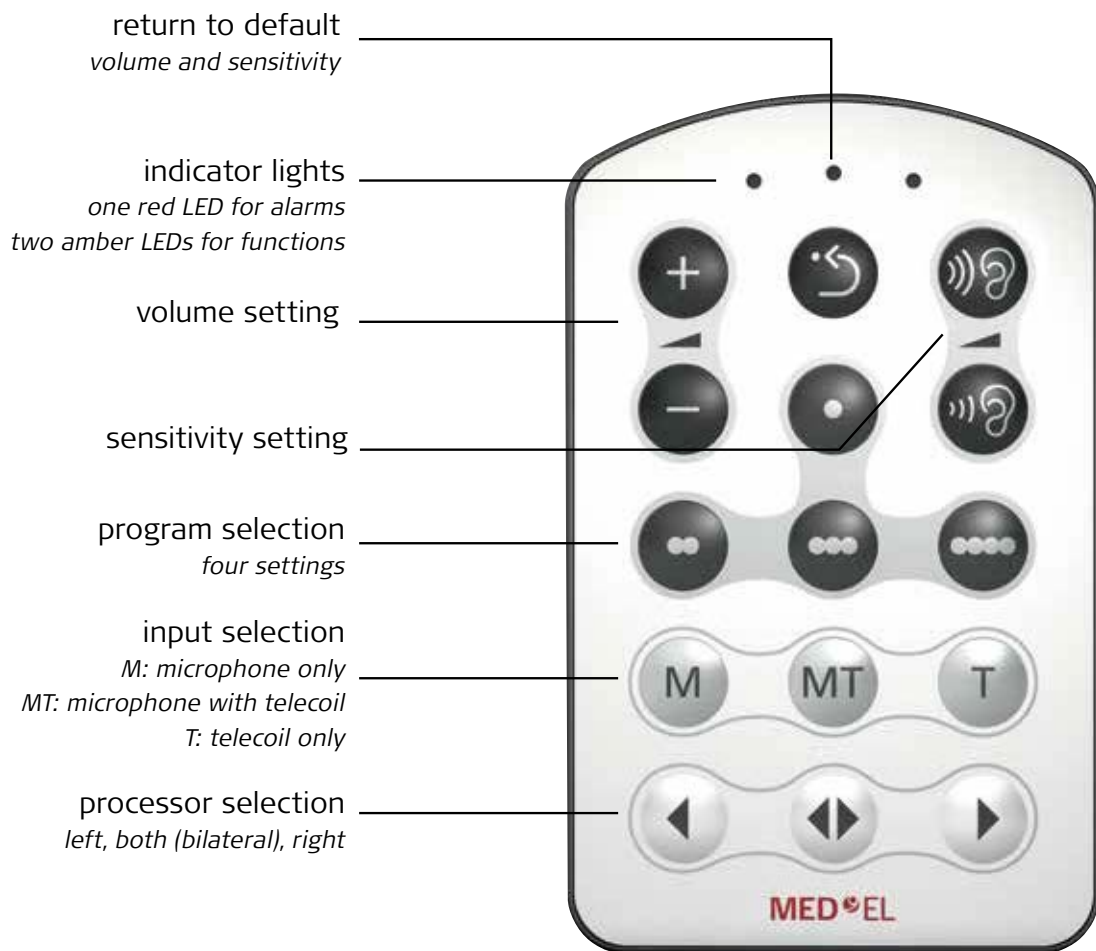
The processor selection keys allow selecting the left, right or both processors.





# USING THE FINETUNER

FOR USE WITH OPUS 2, RONDO, AND RONDO 2



The sleek, simple-to-use **FineTuner** and **FineTuner Echo** Remote Controls give MED-EL users access to all the settings needed to use their audio processor: volume, sensitivity, programs, and telecoil options.



# KEYS ON THE FINETUNER



## Default key

This key sets volume and microphone sensitivity to pre-defined values determined by the audiologist. (NOTE: It does not reset programs)



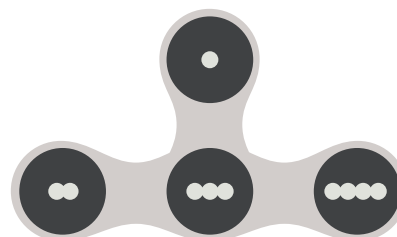
## Volume keys

Two keys to increase or decrease overall loudness. You can increase and decrease volume to the maximum and minimum volume set by your audiologist.



## Sensitivity keys

Two keys to increase or decrease the microphone's sensitivity. Increasing sensitivity brings in more environmental sounds, while decreasing sensitivity focuses more on sounds closest to the user.



## Program selection keys

Four keys to access up to four different programs.



## Input keys

Three keys to select the microphone (M), the telecoil (T) or the microphone and telecoil together (MT) as the signal source. These keys are independent of all other processor settings and can be used with any program selection (1,2,3, or 4), volume, or sensitivity setting.



## Processor keys (for bilateral users)

The processor selection keys allow selecting the left, right or both processors. The keys are also used to activate or deactivate the keyboard lock feature.

# BRINGING IT ALL TOGETHER

Now that you have your equipment, let's put it to work for you. The following pages illustrate basic setups and what equipment is needed for each.

**Induction Loop Setup:** This is a large-area telecoil loop system used in large venues and even in the home. Position yourself anywhere within the "looped" listening area and use the built-in telecoil on your audio processor.

**Roger Pen Examples:** A Roger Pen can be connected to various audio sources for wireless streaming to your processors. You can also use the Pen as a remote microphone for listening in large spaces or noisy environments.

**Transmitter/Receiver Setup:** An audio source is transmitted to a receiver via infrared signals, radio frequency, etc. Depending on the system, you will either need to use headphones, a telecoil accessory, an audio cable, or a wireless ear-level receiver.

**Personal Audio Device Setup:** Several options are available to connect devices like an iPod or portable game system. A telecoil accessory or audio cable can be directly connected to the audio device, or a wireless connection can be used with an ear-level receiver.

**Phone Setup:** A telecoil accessory with a built-in microphone works well with most phones. You can also use the built-in telecoil on your processor directly with a telecoil-compatible phone.

**Bluetooth Device Setup:** Some Bluetooth receivers can be connected directly to the audio processor or used with a headset or telecoil accessory.







# Induction Loop Setup

Using in churches, arenas, classrooms, home theaters, etc.

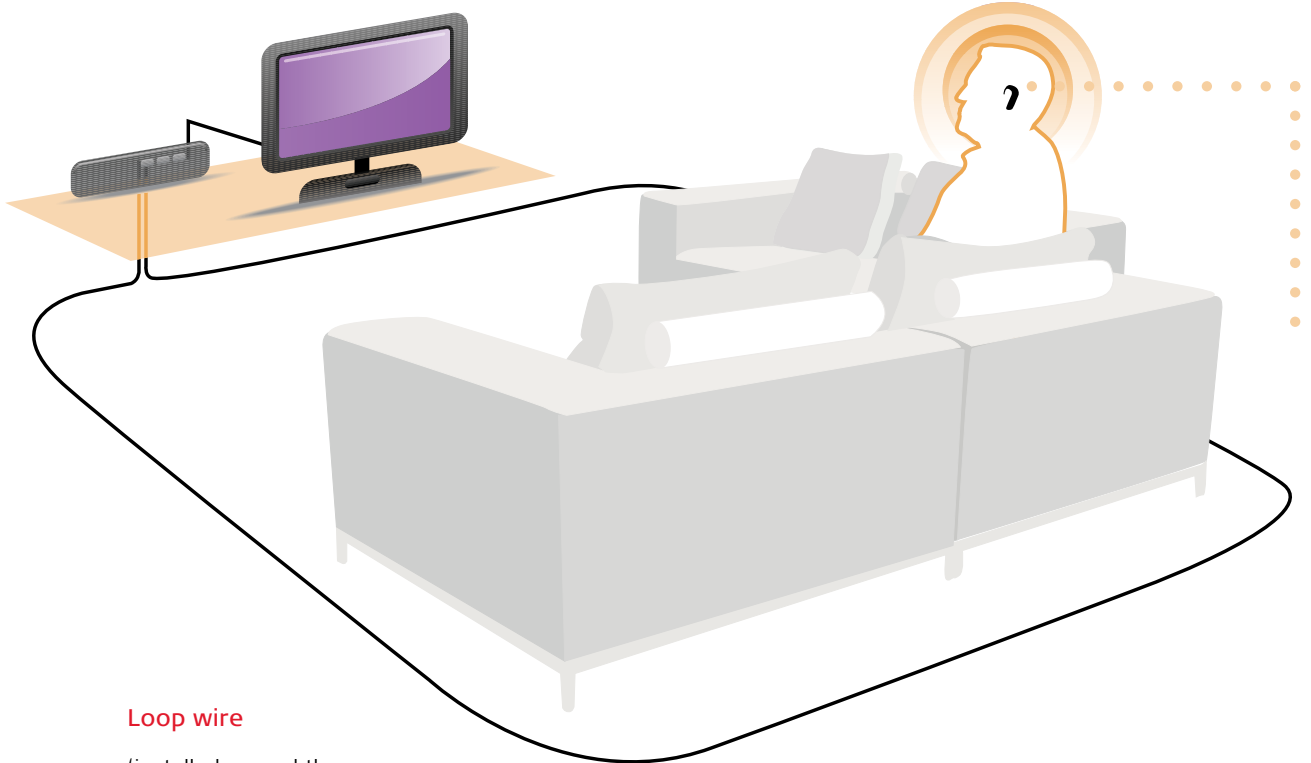
## Tele-loop amplifier

(connected to TV, entertainment receiver system, PA system, etc.)

## Using built-in telecoil

To activate telecoil, select **T** or **MT** on the FineTuner.

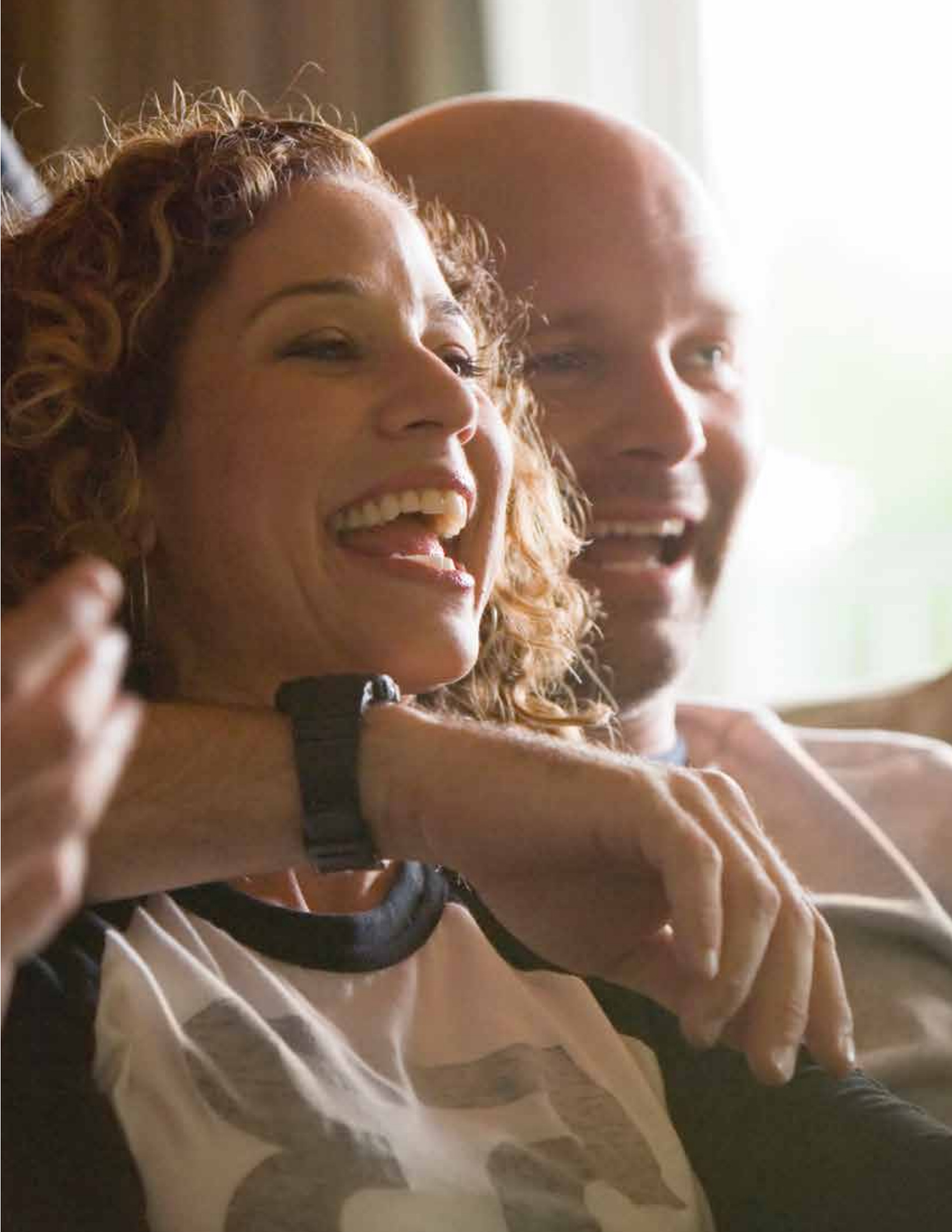
Other settings (volume, etc.) can also be adjusted on the amplifier, the television, or FineTuner.



## Loop wire

(installed around the room – under carpet, on the ceiling, etc.)

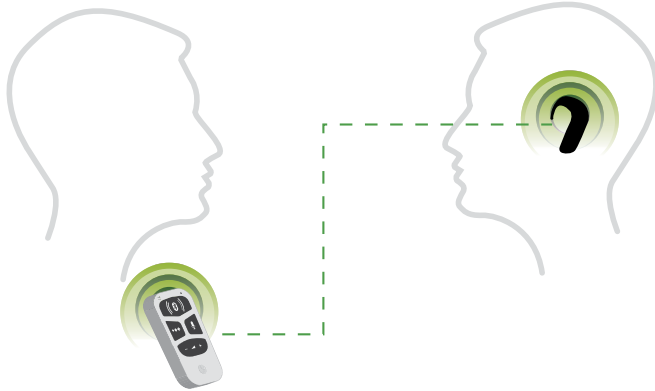
A wireless signal sent through the loop wire can be accessed anywhere within its boundaries.





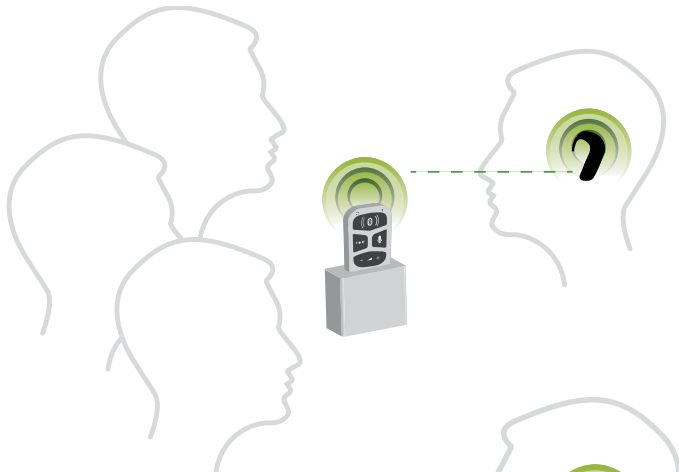
# AudioLink Examples

(For hearing in distance, noisy environments, hands-free calls, and home theater.)



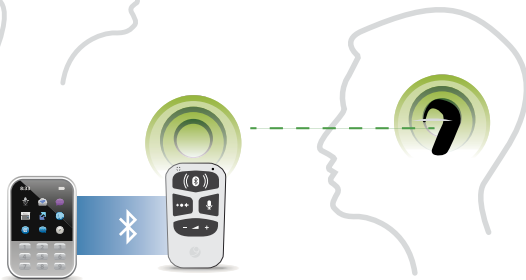
## As a Remote Microphone

Speaker wears the AudioLink or the AudioLink is positioned near the speaker. Audio is streamed directly to the processor(s).



## As a Table Microphone

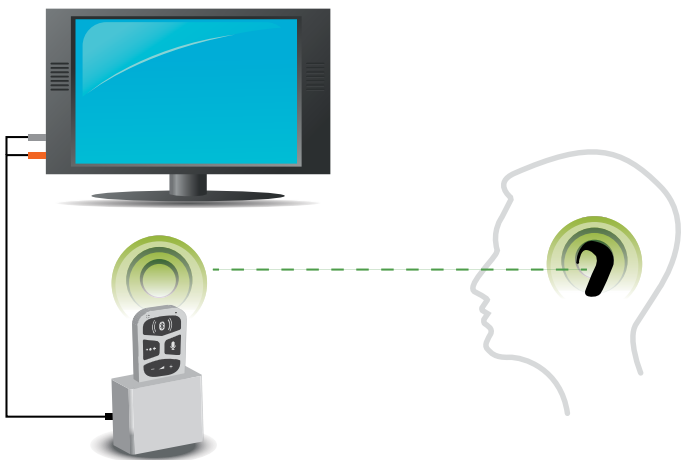
The AudioLink can be positioned on a table as close to the speaker(s) as possible. Audio is streamed directly to the processor(s).



## Using with Bluetooth Devices

AudioLink can be paired with Bluetooth-enabled devices. For use with phones, the audio is wirelessly streamed to the processor for hands-free calls.

For streaming music or other audio, an accessory cable connects the AudioLink to the device and the sound is wirelessly streamed to the processor(s). Third-party apps are available that allow the device to stream to AudioLink without an accessory cable.



## Using with Home Theater

By using the Dock with AudioLink, audio from your television or home theater can be streamed directly to your processor(s).

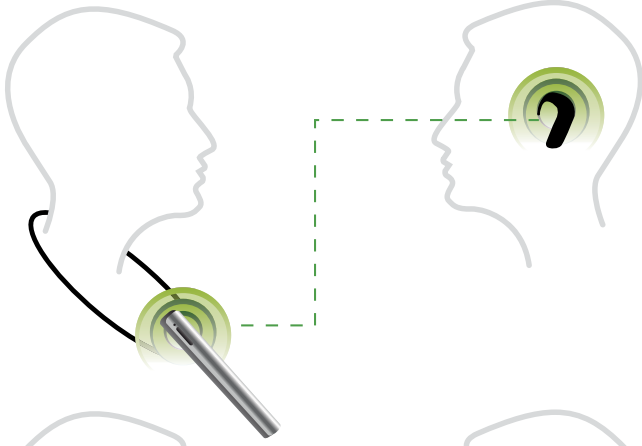






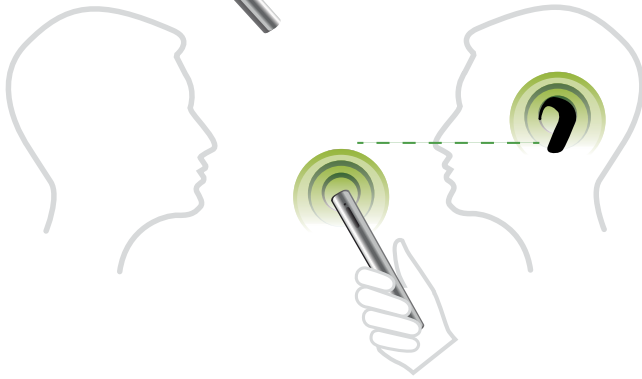
# Roger™ Pen and Roger Select™ Examples

(For hearing in distance, noisy environments, hands-free calls, and home theater.)



## Presenter Mode

Speaker wears the Roger Pen or Roger Select transmitter and audio is streamed directly to processor's Roger receiver over a distance of up to 100 feet.

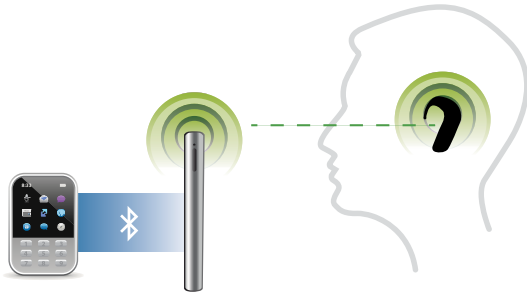


## Interview Mode

Listener points the Roger Pen transmitter toward the speaker and audio is streamed directly to processor's Roger receiver.

## Table Mode

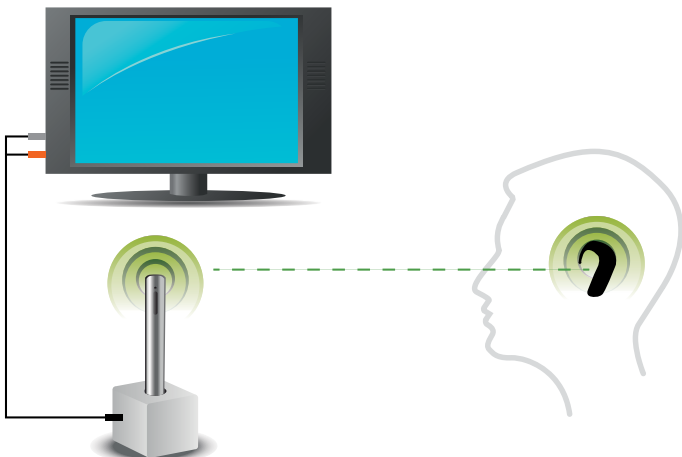
The Roger Select offers multiple (and selectable) microphones to optimize listening around a table.



## Using with Bluetooth Devices

Roger Pen or Roger Select can be paired with Bluetooth-enabled devices. For use with phones, the audio is wirelessly streamed to the processor for hands-free calls.

For streaming music or other audio, an accessory cable connects the Pen or Select to the device and the sound is wirelessly streamed to the processor's Roger receiver.



## Using with Home Theater

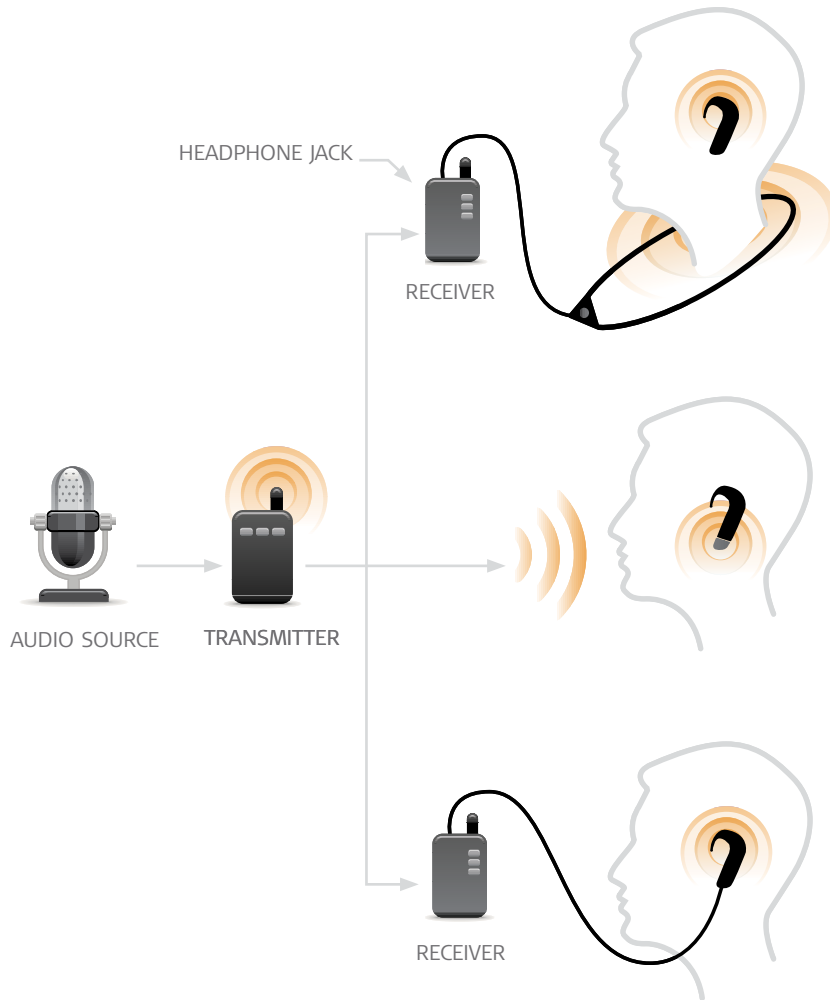
By using the Dock with the Roger Pen or Roger Select, audio from your television or home theater can be streamed directly to your processor's Roger receiver.





## Transmitter/Receiver Examples

Using in churches, arenas, classrooms, home theaters, etc.



**Using built-in telecoil (with neckloop, silhouette, or large-area induction loop systems)**

To activate telecoil, select **T** or **MT** on the FineTuner.

Other settings (volume, etc.) can also be adjusted using the receiver or FineTuner.

**Ear-level wireless receiver (FM systems)**

Adjust settings (volume, etc.) using the FineTuner.

*Telecoil is not used in this setup.*

**Direct connect via audio cable**

Adjust settings (volume, etc.) using the receiver or FineTuner. *Telecoil is not used in this setup.*

*NOTE: RONDO users will connect via the Mini Battery Pack (not shown). See user manual for details.*

### TIP



The transmitter and receiver must be "paired" for correct operation. Consult with the venue to ensure that the equipment is working properly.

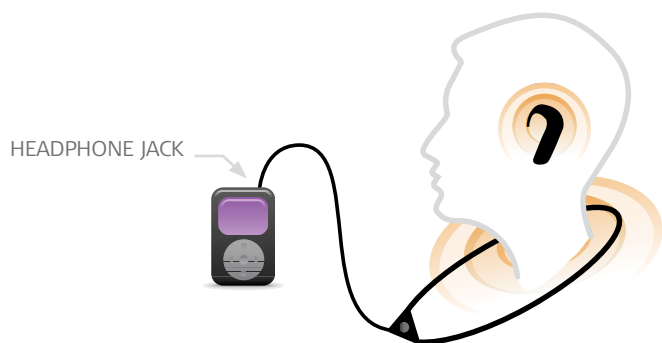






## Personal Audio Device Examples

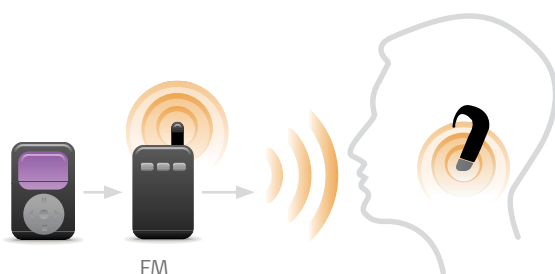
MP3 players, portable game systems, digital eBooks, etc.



### Using built-in telecoil (with neckloop or silhouette)

To activate telecoil, select **T** or **MT** on the FineTuner.

Other settings (volume, etc.) can also be adjusted using the receiver or FineTuner.



### Ear-level wireless receiver (FM systems)

Adjust settings (volume, etc.) using the FineTuner.

*Telecoil is not used in this setup.*



### Direct connect via audio cable

Adjust settings (volume, etc.) using the receiver or FineTuner. *Telecoil is not used in this setup.*

*NOTE: RONDO users will connect via the Mini Battery Pack (not shown). See user manual for details.*

#### TIP

**Telecoil** is only activated for use with telecoil-enabled neckloops, silhouettes, or in large-area induction loop systems. Use **MT** (microphone/telecoil) or **T** (telecoil only) by selecting the preferred buttons on the FineTuner.

For **ear-level wireless receivers** (as in FM systems), telecoil is NOT used. The receiver will automatically recognize the incoming signal and transfer the sound to your processor(s).

For **direct-connect using the audio cables**, telecoil is NOT used. This is a simple "plug-and-play" setup, and sound is immediately transferred to your processor(s).

Battery-operated audio devices are recommended for use in a direct connection setup.



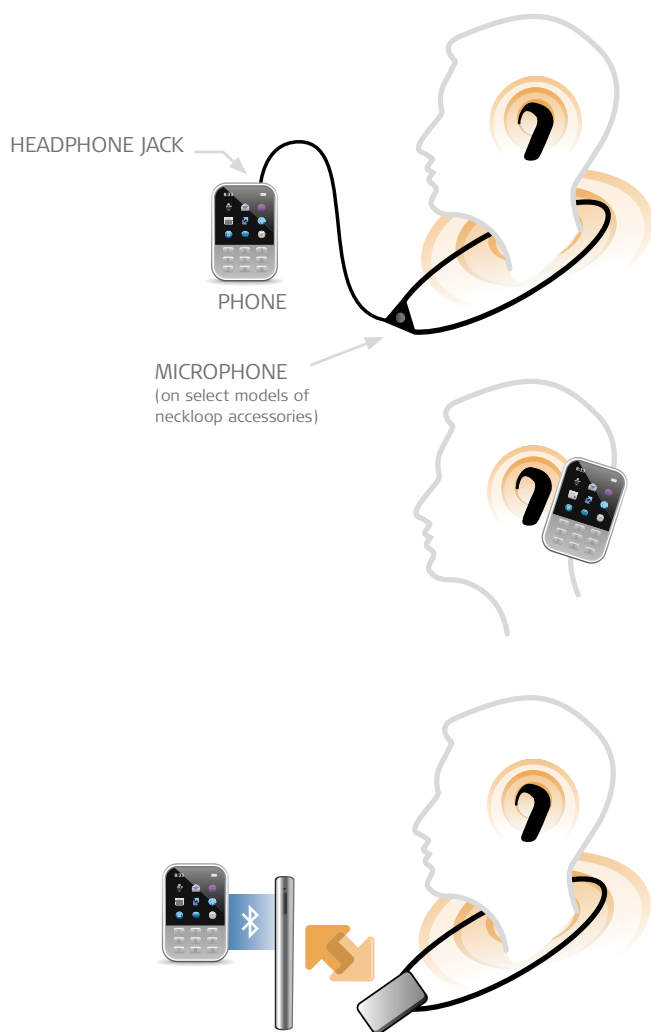
FINETUNER and FINETUNER ECHO





## Phone Setup Examples

Using the built-in telecoil feature



### OPTION 1:

**Using built-in telecoil**  
(With microphone-equipped neckloop or silhouette)

To activate telecoil, select **T** or **MT** on the FineTuner.

Other settings (volume, etc.) can also be adjusted using the phone or FineTuner.

### OPTION 2:

**Using built-in telecoil**  
(with telecoil-compatible telephone)

To activate telecoil, select **T** or **MT** on the FineTuner.

Place phone next to ear. Other settings (volume, etc.) can also be adjusted using the phone or FineTuner.

### OPTION 3:

**Roger MyLink**

To activate telecoil, select **T** or **MT** on the FineTuner.

Sound is transmitted using Roger transmitter (e.g., Pen) and sent to MyLink worn around neck.

Other settings (volume, etc.) can also be adjusted using the phone, MyLink or FineTuner.

### TIP



The standard headphone jack is 3.5 mm, but some phones will have the smaller 2.5 mm headphone jack.

An inexpensive adapter, available at local electronics stores, will be required to use the smaller jack.

The Federal Communications Commission (FCC) defines hearing aid compatibility for wireless devices. Higher ratings are better.

"M" ratings measure microphone quality and "T" ratings measure telecoil quality.

Cell phones rated both M4 and T4 provide the best compatibility with hearing devices like cochlear implants and hearing aids.









## Bluetooth® Setup Examples

Using with Bluetooth-enabled devices (tablets, phones, computers etc.)



### Using Bluetooth

To activate telecoil, select **T** or **MT** on the FineTuner.

Other settings (volume, etc.) can also be adjusted using the telephone, the Bluetooth device or FineTuner.

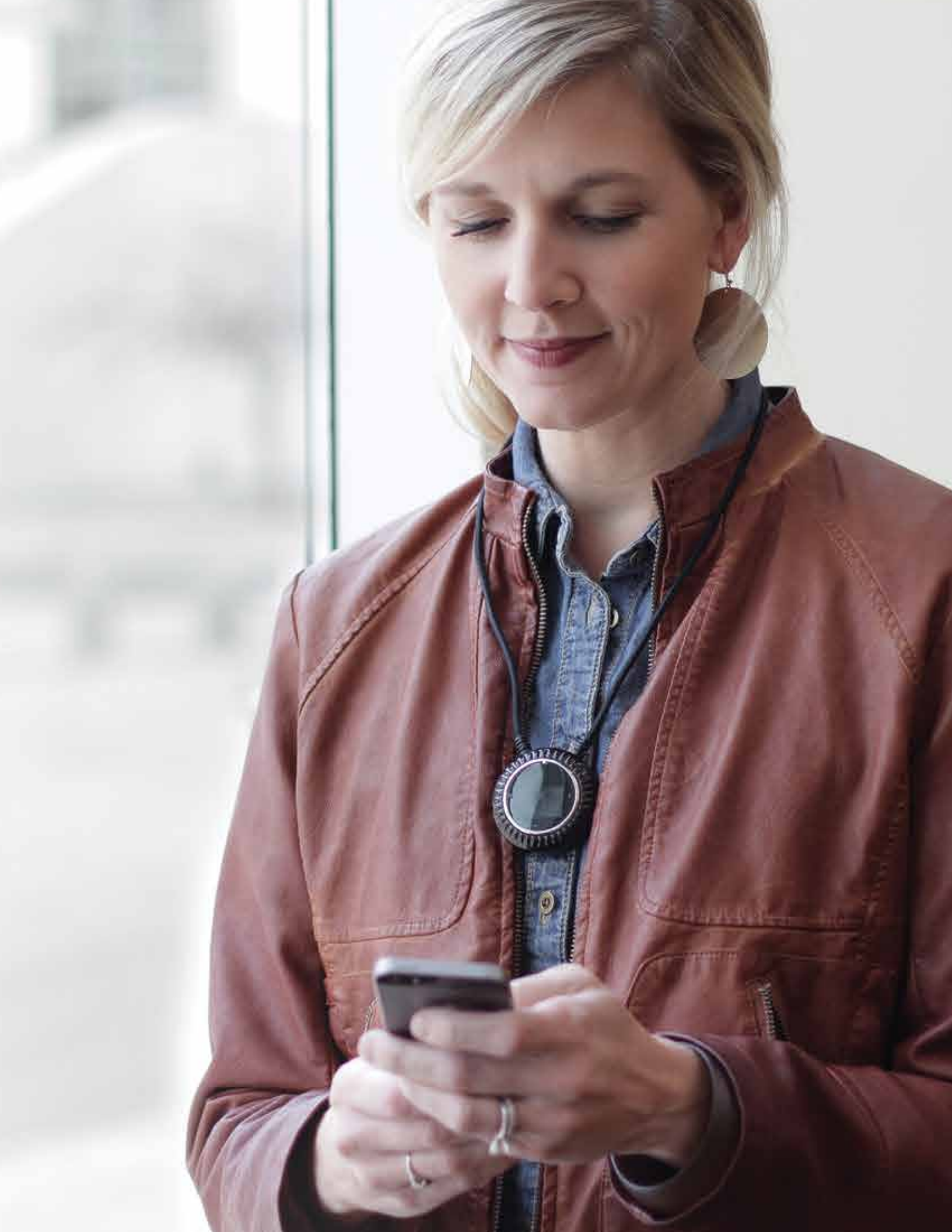
### TIP



The phone and Bluetooth device must be “paired” for correct operation. Consult with the user manuals to ensure that the equipment is working properly.

Bluetooth is a low-power, short-range technology that wirelessly connects cell phones (or MP3 devices, tablets, computers, etc.) to a compatible receiver. Some receivers can be connected directly to the audio processor or are used with a headset or telecoil accessory.





# ACCESS TO ALDS IN VENUES

## Requesting ALDs

ALDs can usually be obtained at Guest Services, Concierge, or Box Offices at venues that provide them. When asking for an ALD, be sure to ask if they have the **receiver boxes** - not headsets with earbuds - that use neckloops or have a headphone jack. (You can use your own neckloop or headset if you own one.)



Look for the **ALD symbol** at venues or events. This means assistive devices are available.



## Visual Aids

Many venues like museums and theaters can provide **scripts** of the performance or presentation. It may require advanced notice, so you should consider requesting one several days prior to the event.

**Captioning services** may be available at venues like theaters or theme parks. There are different types of services available - personal captioning devices, reflective captioning, open-captions (subtitles), and captioning glasses. Check the movie listings or contact the venue directly for additional information.

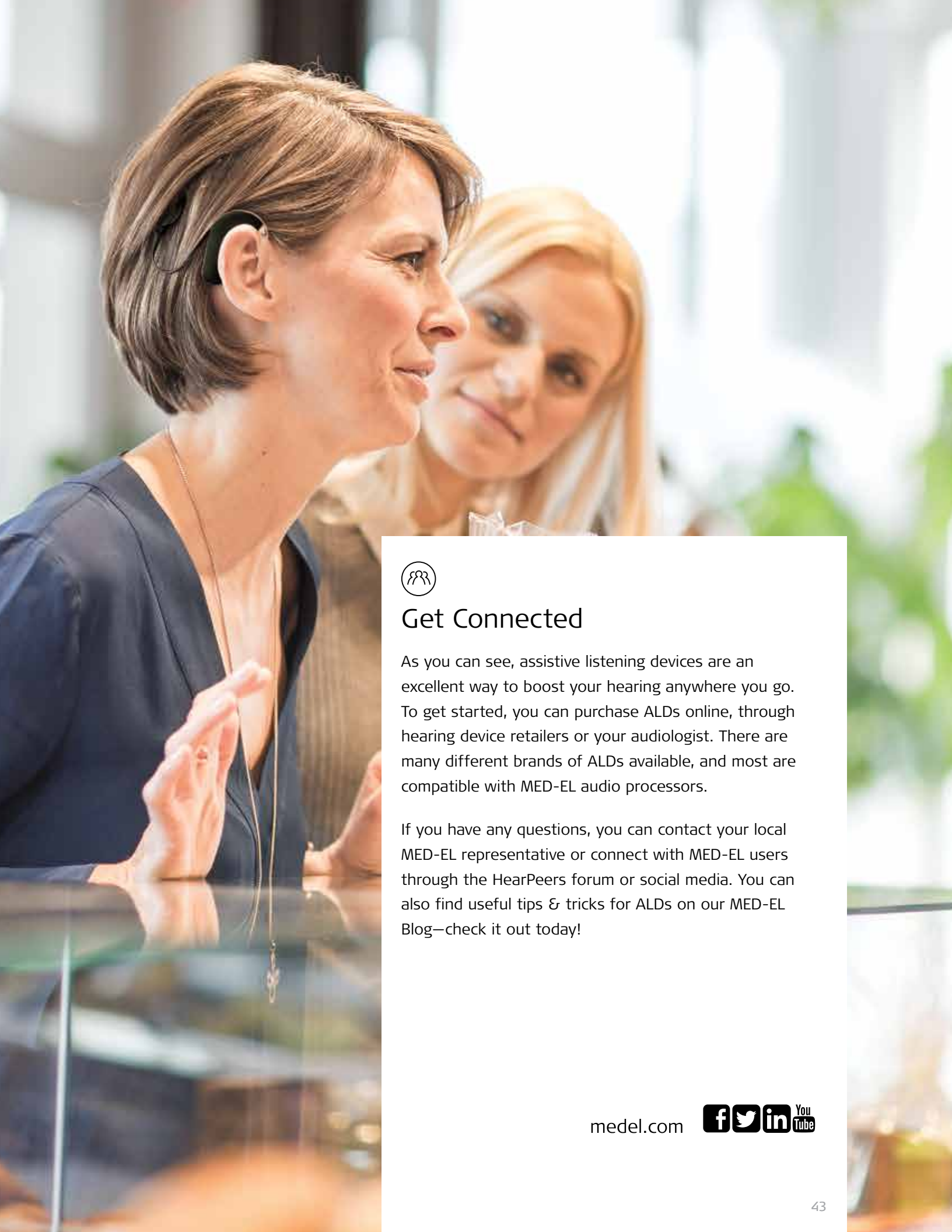
## Purchasing ALDs

Purchase a personal telecoil accessory (neckloop or silhouette) for use when attending events that provide assistive listening technology. Neckloops and silhouettes are available from a variety of online vendors. Some telecoil products are also amplified and can provide additional volume, if needed.

Furthermore, some telecoil accessories include a **built-in microphone** that works extremely well with telephones. The benefit of having a built-in microphone is that you can use it with many FM systems, MP3 players, and even your telephone. Be sure to look at all the specifications before making your purchase to ensure that it has everything you need.

Consider purchasing **inexpensive adapters** from a local electronics store. (An example is a stereo-to-mono adapter.) Some older ALD systems use mono jacks and may not work with a telecoil or audio cable that uses a stereo plug.





## Get Connected

As you can see, assistive listening devices are an excellent way to boost your hearing anywhere you go. To get started, you can purchase ALDs online, through hearing device retailers or your audiologist. There are many different brands of ALDs available, and most are compatible with MED-EL audio processors.

If you have any questions, you can contact your local MED-EL representative or connect with MED-EL users through the HearPeers forum or social media. You can also find useful tips & tricks for ALDs on our MED-EL Blog—check it out today!

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