

Review of Voice Amplification Systems

Prepared by Carol Doles
NSDA Eastern Regional Representative

PORTABLE VOICE AMPLIFIER

- Increases the volume of your voice
- A small speaker is worn on a belt, armband, lanyard, or on an article of clothing
- The microphone can be a headset, lapel mic, or hand-held
- The microphone can be wired or wireless



Pros: Portability, inexpensive options, adjustable volume, options available to match activity

Cons: Feedback if microphone is too close to speaker, may be too loud for listeners close to the speaker

Links for comparison articles

I encourage you to conduct your own research to find the unit that best suits your needs. The following links are articles I found during a quick google search. I found some useful comparison information in them. They are listed in no particular order.

- [Top 10 Best Voice Amplifiers in 2020 Reviews](#)
- [The 10 Best Voice Amplifiers](#)
- [The 5 Best Voice Amplifiers – \[2020 Reviews & Rankings\]](#)
- [Best Portable Voice Amplifiers for Teachers, Presenters – 2020 Review](#)

Links for devices that were evaluated

- [Portable Voice Amplifier SHIDU Personal Speaker Microphone Headset Rechargeable Mini Pa System for Teachers Tour Guides Coaches Classroom Singing Yoga Fitness Instructors](#) *This model is no longer available but there are other options in the same price range from \$25.99 to \$39.99*

SMARTPHONE APP USED WITH A SPEAKER

- Smartphone provides the microphone used to amplify voice
- An external microphone can be plugged into phone and used as the microphone



Microphone Live 4.4
Airplay, Bluetooth & Line Out
Von Bruno
★★★★★ 4.4, 1K Ratings
Free

- Phone can be held, worn on the belt, in an armband or placed in a pocket
- Phone can be connected to a speaker by a wire or through Bluetooth
- Multiple paid and free apps are available



Pros: Low cost, flexibility to connect to different speaker systems, could be used as an intercom

Cons: Feedback when the phone/microphone is too close to the speaker

Link for Bluetooth speaker that was evaluated

You can use a speaker that you already own. I did not have a Bluetooth speaker, so I chose this inexpensive one, and it works fine.

- [OontZ Angle 3 \(3rd Gen\) - Bluetooth Portable Speaker, Louder Volume, Crystal Clear Stereo Sound, Rich Bass, 100 Ft Wireless Range, Microphone, IPX5, Bluetooth Speakers by Cambridge Sound Works \(Black\)](#) *Current Cost: \$25.99 plus tax*

Link for the app that was evaluated

There are multiple choices for both iPhones and Androids. I chose this free app for my iPhone.

- [Microphone Live by Von Bruno App Preview](#)

Link for directional microphone that was evaluated

- Link for lapel microphone, [Rovtop Professional Lavalier Lapel Microphone - Omnidirectional Condenser Microphone for iPhone, Android phone, DSLR Camera and Computer, Lapel Mic for Youtubers, Live Streaming, Video Recording.](#) *Current Cost: \$11.99 plus tax*



TOUR GUIDE SYSTEM

- These systems typically involve a transmitter/microphone device (used by tour guide) along with multiple receiver/headset devices (used by tour participants)
- The person with a voice disorder wears a small transmitter on a lanyard around the neck and uses a headset, lapel, or hand-held microphone
- Listeners wear a small receiver on a lanyard around the neck and use a headset or ear buds



Pros: Background noises are greatly reduced, allows for communication with intended listeners, two-way systems are also available

Cons: A device must be worn, need extra receivers if there are several listeners, headsets would be cumbersome if dining, but lapel mics would likely pick up more background noise

Links for two companies that will sell the number of transmitters and receivers that you need rather than the packaged set sold in larger quantities

Retekess | www.retekess.com

Contact Person: Mia at marketing@retkess.com



System that was evaluated (*approximately \$70 for one transmitter/microphone and one receiver/ear buds, lanyards and charging cables*). [Retekess TT109 Tour Guide System 2.4GHz One Way Transmitter and](#)

[Receiver](#) I originally ordered the headset with the transmitter and later ordered a lapel microphone. I am waiting on the lapel microphone from Retekess, but am using a different lapel mic until it arrives.



Tourguide Solutions | www.tourguidesolutions.com

Contact Person: Sam Friederick at sfriederick@tourguidesolutions.com

This company offered a free demo for its products. I tried the standard option and the cost was approximately \$660. They also offered different options for microphones and listening devices with cost adjusted accordingly. You could choose to use your own microphone/ear buds/etc. which would reduce the cost. They are great to work with and the product worked well.



<https://www.tourguidesolutions.com/products/tgs-900/>

Please Note: The NSDA does not endorse or recommend specific products but rather provides this information as possible tools to help support people with spasmodic dysphonia and related voice conditions. Special thanks to Carol Doles for testing and assembling this information. Carol has adductor spasmodic dysphonia and serves as the Eastern Regional Representative for the NSDA.

Considerations for Choosing a Personal Voice Amplifier

Uses/Situations

- How will you use the voice amplifier?

Cost

- What is the purchase price for the voice amplifier?
- What is your budget?
- Are there free options? Can you utilize equipment you already have?

Comfort

- Is the voice amplifier comfortable to wear?
- Is it lightweight?
- Can the voice amplifier be worn around the waist (belt, belt clip), on the arm (armband), around the neck (lanyard)? Are any of these included?

Durability

- Is the voice amplifier durable?
- Is the voice amplifier water resistant?

Sound

- Is the sound produced clear?
- Is the volume adjustable to suit your situations?
- Is the volume suitable for inside and outside use?
- Is the volume loud enough for large gatherings?
- If the voice amplifier is wireless, what is the transmission range?

Feedback

- Are there reported feedback issues? What is the situation?

Battery life

- What is the battery life?
- How long is required to fully charge a battery?
- Is the voice amplifier easy to charge?
- Are there flexible charging options (computer, wall outlet, car)?

Portability

- Is the voice amplifier easy to transport and store?
- Is the voice amplifier/microphone easy to assemble and disassemble?
- Is the voice amplifier small/compact?

Microphone

- What type of microphone can you use with your voice amplifier (headset, lapel, hand-held, standalone)?
- Is the voice amplifier wired or wireless? If a headset microphone will be used,
- Does the headset microphone stay together and in good position when worn?
- Is the headset microphone comfortable to wear?
- Does the headset microphone offer different options for how it is to be worn (over the ears, around the neck)?

Additional features

- Does the voice amplifier have any additional features (MP3 player, music player, Bluetooth capability, ability to use batteries instead of recharging, audio storage)?
- Will you use the added features?

Design

- Are the controls on the voice amplifier easy to understand and use?
- Is the display easy to read?
- Is there a display that shows volume level?
- Is there a display that shows battery charge level?

Best Feature/Shortcomings

- What is the best feature of the voice amplifier?
- What are the shortcomings of the voice amplifier?

Why I Voice Amplification Systems

By Carol Doles



I have always been a fixer. I like to believe that when I am faced with an obstacle, I will be able to find a way to conquer it or work with it to achieve my goal. Things were no different when I developed adductor spasmodic dysphonia. It was one of the biggest obstacles I had ever faced and stood in the way of achieving a goal I had had since childhood, the goal of teaching.

It took six years of misdiagnoses to determine what was wrong with my voice. During that time, I tried hard to make my voice sound normal to my students. This made my voice worse by creating a hefty amount of muscle tension dysphonia in my throat. When I finally received my diagnoses, I was told that if I was able to continue teaching, it would be hard and exhausting. I knew I wanted to try. I chose to pursue voice therapy and botulinum toxin injections.

I found that if I could stop pushing my voice to project across the room, then my broken voice sounded a little better. Then, I had my first injection and experienced breathiness and a quiet voice that could not be heard unless someone was very near to me. I quickly found a personal voice amplifier with a wired headset that I could wear on a belt around my waist. This device increased the volume of my whisper to a level that could be heard across the room. I could continue teaching! I was thrilled! As the effects of the medicine began to wear off and the spasms and tightness returned, I used the voice amplifier to talk softer, and it helped tremendously. Over the years, I have found the amplifier useful in many situations. I have also wished that I had it with me when I had left it somewhere else.

I recently discovered that there are apps for smartphones that can turn them into microphones. I always have my phone with me. Now, all I need is a speaker, Bluetooth or wired, and I have an amplification system at my fingertips. While solving the problem of how to make my voice louder, I still needed a solution for situations when I wanted to be able to talk with my husband in noisy environments where a voice amplifier isn't appropriate.

Although we very much enjoyed date nights at restaurants for example, my soft voice meant that we could not carry on a conversation in most of them. This was discouraging, and we either chose to skip the experience or went, but did not enjoy ourselves fully. On a vacation, I walked past a tour guide talking with his group. I noticed that there was lots of noise from traffic, people, and other tour groups happening all around and yet the participants appeared to hear the guide well. I researched and finally found some companies that would allow us to try their transmitter/receiver combination to see if it would work for our purpose. Imagine our delight when we dined out and could talk with each other. This was a game changer for us. After almost twenty years of struggling with my voice, we can use this to enjoy activities together again. The problem of making my voice louder and the problem of being heard in noisy situations have been helped. Now if I could just talk with a mask on.