



WIRED HEADSET MICROPHONE FACE-OFF

[UmeVoice theBoom](#), [Audio-Technica Pro8HEmW](#),
[Sennheiser ME3](#), [SpeechWare FlexyMike](#), [VXI TalkPro](#),
[Addasound](#) & [Andrea Electronics](#)

Last Update: January 31, 2015

Introduction:

Attempting to select the best headset microphone for speech recognition is nothing short of a daunting task because there are so many excellent choices. For obvious reasons, this review does not cover every headset microphone that can be used for speech recognition but we have spent several years compiling this information from the most popular speech recognition forums like the [KnowBrainer Speech Recognition Forums](#) and working directly with numerous microphone manufacturers. The following review consists of 3 parts:

- (1) My personal take on the [evolution of speech recognition microphones](#)
- (2) The [Pros and Cons](#) of what a general consensus of many top speech recognition experts believe to be the *top five wired headset speech recognition microphones*
- (3) My personal [assessment](#) of what the numbers mean

If you wish to skip past the brief microphone history, click [Pros and Cons](#). If you wish to skip further ahead to my conclusions, click [recommendations](#).

Note that while only one of these microphones could achieve the 1st place overall rating, each is still an excellent choice for speech recognition.

Evolution of Speech Recognition Microphones

When we first began using DragonDictate speech recognition software in the 1980's it seemed to be incredibly impressive technology. Never minding the very deliberate pause after each and every word, we waited with baited breath to see another (hopefully correct) word miraculously appear on our somewhat blurry little screens. It was fun! It was frustrating! It was not very practical. Back then, the couple of wired headset microphone choices available to us were more than adequate.

In 1996, NaturallySpeaking continuous speech recognition was released. With the emergence of this new technology, we had a viable tool for professional as well as personal use. That being the case, we needed microphones designed to better utilize this increasingly more sophisticated software. Microphone manufacturers responded. They designed wireless systems. They designed combination headset microphones that could additionally be used with cell phones, landlines and even hydraulic lifters which picked up our handsets for us. While noise canceling and accuracy continued to improve, ultimately many of us still were not happy with our headset microphones, finding them to be rather inconvenient and/or uncomfortable. Physicians and other professionals were often forced to don and then remove their headsets every few minutes, between patients or clients. Other end users, needing to take verbal notes while talking on the phone, put their callers on hold, which was both inefficient and impolite. While handheld microphones such as the Philips [SpeechMike Air](#) now allow concurrent use of both a microphone and a telephone, they don't solve all problems for all end users. Some of us simply need to keep both hands free. Fortunately, microphone manufacturers have also been busily designing high quality desktop microphones. See our [Battle of the TableMikes](#) review if you would like additional information on table microphones. See our [Battle of the Handheld Microphones](#) review for additional information on handheld microphones and see our [Battle of the Telephone Headsets](#) review for additional information on speech recognition telephone headsets.

A wired headset microphone just might be your best option if: _____

- You are concerned about broadcasting private information
- You don't need to be wireless
- You need to keep both hands free
- You want to get the most bang for your buck
- You need an extremely reliable and portable microphone

Pros & Cons

theBoom Headsets

MSRP: \$125 - \$299

Accuracy: 98%

Noise Cancellation: 8 out of 10

Overall Rating: 7 out of 10



theBoom Headsets Pros:

- Excellent noise cancellation
- Multi-design use (speech recognition/cell phone, landline)
- Pro-1 & Pro-2 feature military grade construction
- TheBoom Quiet and Pro-3 include high fidelity playback speakers
- Mute button
- 1 year manufacturer warranty

theBoom Headsets Cons:

- Poor warranty service
- Consumer grade manufacturing quality
- BBB F- rating

Audio-Technica Pro8HEmW, ATH-COM1 & ATH-COM2

MSRP: \$50 - \$149

Accuracy: 100%

Noise Cancellation: 10 out of 10

Overall Rating: 10 out of 10

Audio-Technica Pro8HEmW, ATH-COM1 & ATH-COM2 Pros:

- Rated #1 in Noise Canceling
- Rated #2 in Accuracy
- ATH-COM 1 (discontinued) Rated #1 in affordability
- One of the lowest failure rates in the industry
- 1 year manufacturer warranty



Audio-Technica Pro8HEmW, ATH-COM1 & ATH-COM2 Cons:

- No speakers on Pro HEmW
- Consumer grade speaker pads can sweat ears on ATH-COM1/2
- ATH-COM1/2 (in end-of-life cycle)
- No mute switch

Sennheiser ME3 (speech version)

MSRP: \$199

Accuracy: 98%

Noise Cancellation: 9 out of 10

Overall Rating: 9 out of 10



Sennheiser ME3 (speech version) Pros:

- German engineering (think Mercedes)
- Rugged
- Very noise canceling
- One of the lowest failure rates in the industry
- **2 year manufacturer warranty**

Sennheiser ME3 Cons:

- No speakers
- No mute switch
- Nontraditional wearing style
- More expensive than comparable headsets

SpeechWare FlexyMike SE & DE & DEC

MSRP: \$129 - \$189

Accuracy: 100%

Noise Cancellation: 9 out of 10

Overall Rating: 10 out of 10



SpeechWare FlexyMike SE & DE & DEC Pros:

- Belgium engineering
- Constructed of titanium alloy and stainless steel like modern glasses weighing little more than a postage stamp combining a rigid frame with flexibility where it counts
- The most comfortable lightest microphone we have tested
- The most accurate headset we've tested
- **2 year manufacturer warranty**

SpeechWare FlexyMike SE & DE & DEC Cons:

- No speakers
- No mute switch
- Nontraditional wearing style
- More expensive than comparable headsets

Addasound Crystal SR2821/22, SR2801/22, SR2701/02

MSRP: \$45 - \$149

Accuracy: 99%

Noise Cancellation: 8 out of 10

Overall Rating: 9 out of 10



Addasound Pros:

- Highly accurate
- Comfortable (protein your questions on SR2821/22 models)
- Unified Communications (supporting VoIP applications)
- Wideband audio processing for natural sound
- Microphone Mute
- Speaker volume control
- Built-in USB soundcard
- 2 year manufacturer warranty

Addasound Cons:

- None

VXi Tria V-DC, TalkPro USB1-3, UC1-3 & SC1

MSRP: \$85 on up

Accuracy: 99%

Noise Cancellation: 9 out of 10

Overall Rating: 9 will out of 10



VXi Tria V-DC, TalkPro USB1-3, UC1-3 & SC1 Pros:

- Light, versatile and highly accurate
- Includes 1 or 2 speaker options
- Tria V, UC3 and USB 3 models include 3 wearing styles
- TalkPro UC1-3 includes built-in USB echo canceling soundcard for use with VoIP applications
- 2 year manufacturer warranty

VXI Tria V-DC, TalkPro USB1-3, UC1-3 & SC1 Cons:

- With the exception of the Tria V-DC and TalkPro SC1, all other models include a proprietary VXI soundcard cord which will prevent the use of any other brand of USB soundcard.
- With the exception of the Tria V-DC, all other new TalkPro microphones include a coiled cable which is great for keeping the microphone off the floor but can pull slightly against the side of your head. We prefer straight cables.

Andrea Electronics ANC 700/750

MSRP: \$59-\$69

Accuracy: 95%

Noise Cancellation: 8 out of 10

Overall Rating: 7 out of 10



Andrea Electronics ANC 700/750 Pros:

- Patented active noise cancellation
- 1 year manufacturer warranty
- Includes quick disconnect cable

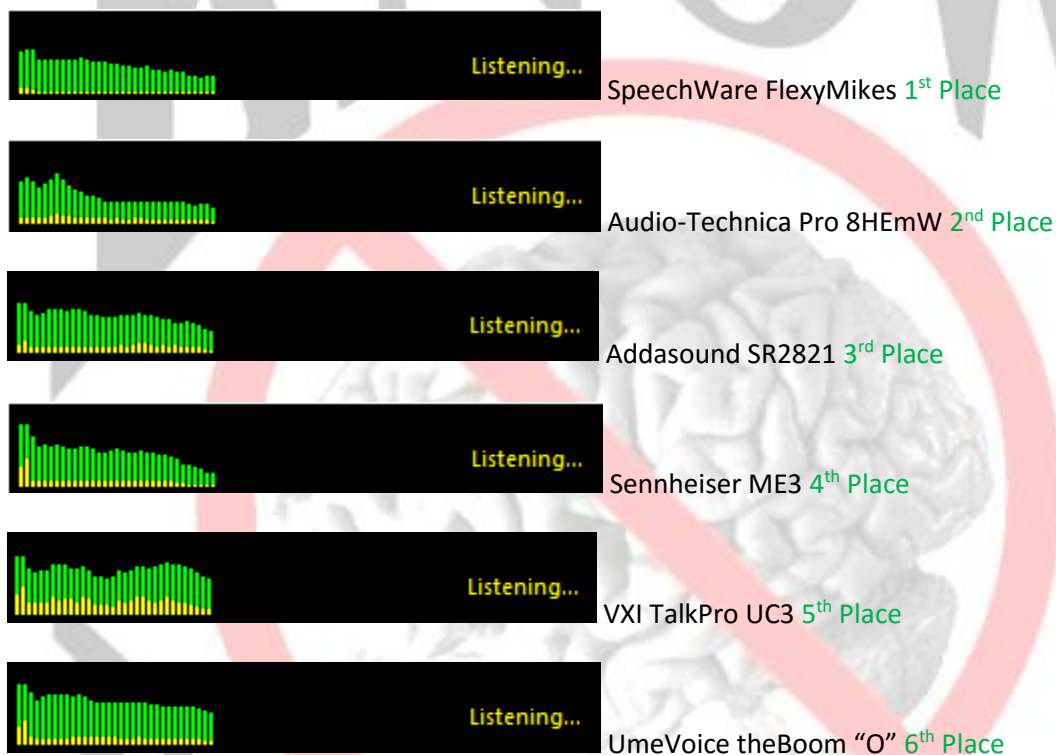
Andrea Electronics ANC 700/750 Cons:

- Outdated late 90s technology

Conclusions

In 2004, the Sennheiser ME3 became the gold standard for speech recognition headset microphones. Although the ME3 is still considered to be a good microphone, it hasn't been improved or redesigned since its inception while other microphone manufacturers have been looking to knock the ME3 off its pedestal. UmeVoice became the 1st company to drop the Sennheiser ME3 down a notch when they introduced the theBoom line of microphones which were less expensive, slightly more accurate and noise canceling. UmeVoice reigned king for several years until VXI revamped their TalkPro

line of microphones which didn't beat the Boom line of microphones but did manage to squeak by the Sennheiser ME3 dropping it to 3rd place. Audio-Technica's Pro 8HEmW dropped the previously mentioned microphones down a peg in September of 2013 but the new SpeechWare's FlexyMike DE & SE replaced the Pro 8HEmW as the King of the Hill. The FlexyMike DEC (introduced on June 20, 2014) drop the ME3 down another notch by introducing improved noise filtering. See following Dragon NaturallySpeaking 12 Audio Check scores:



1st Place ~ SpeechWare FlexyMike DEC/DE/SE ([Click to See](#))

Note: This microphone works best with a [USB](#) external soundcard.

In our opinion, the FlexyMikes reign supreme. The [FlexyMike DE](#) and [FlexyMike DEC](#) (dual ear models) wrap securely around both ears. The [FlexyMike SE](#) (ultralight single ear model) wraps securely around either ear. All 3 microphones produced the best signal-to-noise ratio (as noted above), in a significantly lighter more comfortable frame than other headsets, while producing 100% accuracy in all but the noisiest of environments. The DE

and SE models feature the same microphone element. The FlexyMike DEC includes a more noise filtering cardioid microphone capsule which is ideally suited to noisy environments (airports, subways, cafés etc.). The DEC is one of the most noise filtering microphones we have ever tested. All 3 models feature a titanium alloy wire frame which is extremely both lite and sturdy. We also appreciated the manufacturer 2 year warranty. Note that the FlexyMike DEC is the most recent model to be released.

UPDATE: We rate the FlexyMike DEC #1 in comfort, accuracy, noise filtering, construction and warranty.

- Only headset microphone, other than the Pro 8HEmW, to produce 100% accuracy in a controlled environment
- Lightest professional speech recognition headset
- Most comfortable
- Most noise canceling headset (DEC model)
- 1st microphone to be rated #1 by our in-house and independent microphone testers in comfort

Additional manufacturer information available at www.FlexyMike.com/

2nd Place ~ Audio-Technica Pro 8HEmW, ATH-COM1 & 2 ([Click to See](#))

Note: This microphone works best with a [USB](#) external soundcard.

If you're looking for a microphone designed for a rough environment (Road warrior) that can additionally withstand the highest environmental noise we could throw at it (like a live concert or construction site), the Pro 8HEmW would be an excellent choice, tying the FlexyMike DEC for 1st place for both noise cancellation and accuracy.

- Only headset microphone, other than the FlexyMike, to produce 100% accuracy in a controlled environment
- 1st microphone to produce 99% accuracy while listening to music at 85 dB
- The only hyper-cardioid headset microphone on our website

- *1st microphone to be rated #1 by our in-house and independent microphone testers in accuracy and noise cancellation (tied with the FlexyMike DEC)*

Additional manufacturer information available at www.audio-technica.com/

3rd Place ~ Addasound SR2821/22, SR2801/02 & SR2701/02 ([Click to See](#))

Addasound is the most recent line of microphones to be introduced to the speech recognition market ranging from the budget priced \$45 SR2701 to \$50 SR2702 (dual speaker version) to the professional SR2821/22 (dual speaker version) featuring soft protein ear cushions.

It was nearly a two-way tie between VXi and Addasound but Addasound inched into 3rd place by offering better pricing; especially the SR2701 model and better comfort with the SR2821/22 protein ear cushions. Like VXi, all Addasound headsets include a built-in USB soundcard with built-in mute but the Addasound headsets additionally include speaker volume control.

4th Place ~ VXI Tria V-DC & New TalkPro ([Click to See](#))

VXi recently revamped its Tria V-DC/TalkPro line of microphones by beginning to phase out the classic TalkPro Xpress and TalkPro USB 100/200 headsets which are based on an outdated technology that lacks significant noise cancellation. From an accuracy point of view, theBoom line of microphones narrowly beat the TalkPro microphones. From a noise canceling point of view, the new VXI models tied with theBoom microphones. It should be additionally noted that VXI added unified communications and echo cancellation, to their UC line of microphones, for VoIP use. Besides including a two-year warrantee, the VXI microphones offer a better bang for the buck coming in at a slightly lower price than theBoom line of microphones (when including a USB soundcard). Additional manufacturer information available at www.vxicorp.com/

5th Place ~ Sennheiser ME3 ([Click to See](#))

Note: This microphone works best with a [USB external soundcard](#).

The ME3 isn't your average headset. It goes around the back of your head and doesn't include speakers which can take a little getting used to. The ME3 microphone features impressive noise cancellation but we found it to slightly

less accurate than the Pro 8HEmW, theBoom and new VXI line of microphones. The ME3 microphone also has a substantially higher price tag. Additional manufacturer information available at www.sennheiserusa.com/

6th Place ~ theBoom Headsets ([Click to See](#))

Note: This microphone works best with a [USB](#) external soundcard.

For the past 4 years (until we discovered the Pro 8HEmW and FlexyMikes), UmeVoice has managed to hold onto the #1 spot but only marginally beat out VXI's new line of Tria V-DC and TalkPro headsets. From an accuracy and noise canceling point of view, VXI and UmeVoice tied. We subtracted a few points for UmeVoice's one-year warranty, slightly higher price and service department (which we felt could use a little improvement). However, we disliked VXI's choice to incorporate a coiled telephone like cord (which can pull slightly on the side of your head) and their built-in proprietary USB soundcard. Additional manufacturer information available at <http://theboom.com/>

7th Place ~ ANC 700/750 ([Click to See](#))

Note: This microphone works best [USB](#) external soundcard.

The Andrea Electronics ANC line of microphones (Active Noise Cancellation) has been in the top 5 list since the mid-90s and reigned #1 from 1996 through 2002. Unfortunately, other than cosmetic designs, the ANC 700 has seen no improvements since the mid-90s which has left the door open for other, more innovative companies to introduce newer technologies which resulted in our dropping the ANC 700 to the current 7th place rating. Additional manufacturer information available at <http://www.andraelectonics.com/>

Minimally Acceptable:

The following headset microphones are all considered by Nuance to be adequate for speech recognition but none were quite good enough to be included in our [Microphone Comparison Matrix](#):

Andrea Electronics [NC-181](#), [NC-181VM](#), [NC-185VM](#) headsets, Plantronics DSP line of headsets, Nuance OEM (in the box) headsets, VXI Envoy UC headsets and Sennheiser PC line of headsets.

Unacceptable:

The following headset microphones were rejected by our testers:
 All Plantronics wired headsets (other than those previously mentioned), all Logitech, all CyberAcoustic headsets, all Bluetooth headsets, all Koss and Zabaware headsets.

Previous Reviews:

If you would like to see some of our previous reviews check out the following:

[KnowBrainer TableMike Face-Off](#)
[KnowBrainer Handheld Microphone Face-Off](#)
[KnowBrainer Headset Microphone Face-Off](#)
[KnowBrainer Telephone Microphone Face-Off](#)
[KnowBrainer Digital Recorder Face-Off](#)
[KnowBrainer Wireless Headset Face-Off](#)
[KnowBrainer USB Soundcard Face-Off](#)

Current Gold Standards:

The following is a list of microphones, USB soundcards and digital recorders that we consider to be #1 in their respected categories:

Best Wireless Microphone = [Sennheiser MB Pro1 UC](#) & [MB Pro2 UC](#) (Bluetooth)
 Best Combo Telephone Wireless Microphone = [Sennheiser SD Pro1](#)
 Best Handheld USB Microphone = Philips [SpeechMike Premium \(LFH-3500\)](#)
 Best USB TableMike = [SpeechWare 3-in-1](#), [6-in-1](#) & [9-in-1](#)
 Best Wired Headset Microphone = [FlexyMike DEC](#)
 Best USB soundcard = [SpeechWare MultiAdapter](#)
 Best Mobile Bluetooth Microphone = [Sennheiser Presence UC](#)
 Best Digital Recorder = Philips [DPM-8000](#)
 Best Speech Recognition Application = [Dragon Professional 14](#)
 Best Dragon Command Utility = [KnowBrainer 2016](#)

[Lunis Orcutt](#) - Developer of KnowBrainer 2016 (see [What Is KnowBrainer](#)) and founder of [KnowBrainer Speech Recognition Forums](#) (the world's largest speech recognition forum)

[Chat Live](#) w/ a Nuance Gold Certified Speech Recognition Solutions
Provider



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