



## HANDHELD MICROPHONE FACE-OFF

[Nuance PowerMic III](#)

[Nuance PowerMic 4](#)

[Philips SpeechMike Premium,](#)

[Philips SpeechMike Premium Air](#)

January 2, 2024

### **Introduction:**

While preparing to review the new Olympus RecMic II, it occurred to me that the most effective way to do so would be in the context of the top rated handheld speech recognition microphones.

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 handheld 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](#).

## 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 and microphone manufacturers have responded.

### **Hand Held Microphone History:**

Around the turn of the century, Philips dominated the handheld microphone market by introducing the 1<sup>st</sup> non-USB SpeechMike which combined programmable buttons with a rollerball handheld mouse/microphone. The 1<sup>st</sup> units even included a 3 level volume control for various environments (a feature we really could have used on the SpeechMike II and III). One of the main problems with the SpeechMike II was the daily necessity of having to remove oil from the plastic rollerball with rubbing alcohol. Some end-users even resorted to cutting off the thumb from a pair of latex gloves so that they didn't have to clean the ball so often. Eventually Philips replaced the SpeechMike with several USB models of the SpeechMike II which kicked everything up a notch. The plastic ball was coated with mother-of-pearl to resist oily fingers. A number of other handheld microphone manufacturers, like Grundig and Olympus, additionally took a shot at the handheld market which remained firmly in Philips grasp until about 4 years ago when Nuance upped the ante by releasing the Dictaphone PowerMic III. As the manufacturer of both Dragon Medical and the PowerMic III, Nuance enjoyed the advantage of being able to embed the PowerMic III application right into Dragon Medical but another advantage was the introduction of idiot proof programmable buttons that not only allowed you to program the usual dozen or so

NaturallySpeaking hotkey commands but additionally permit the end-user to program any NaturallySpeaking, personal or even a third-party macro by simply typing the name of the command into the button field. Within a few months after the PowerMic III's introduction, it literally took over the market that Philips had dominated for over a decade. Philips answered that challenge by introducing the SpeechMike Air and the SpeechMike III about 2 years ago. Although Philips didn't market the 1<sup>st</sup> wireless handheld microphone (that distinction belongs to the Grundig Digta CordEx) Philips made it work. Although the SpeechMike III introduced a new look and feel, including an antibiotic housing, it was unable to recover the market share it lost to Nuance so Philips went back to the drawing board and came up with the SpeechMike Premium LFH 3500 (think of it as the SpeechMike IV) which introduced additional programmable buttons, large playback speaker, automatic mute (when you lay the microphone down on a flat surface), integrated pop filter, precision stainless steel laser scanned self lubricating removable trackball, improved signal-to-noise ratio, completely redesigned more sensitive extended-range jar proof microphone element, higher accuracy, polished surface (to reduce unwanted fingertip noises), motion sensor, ergonomically improved and most importantly... SIGNIFICANTLY IMPROVED noise filtering. This is the 1<sup>st</sup> handheld microphone that can effectively be used in a crowded Emergency Room. In my opinion, the greatest problem with other handheld microphones is noise filtering. Fortunately, Philips seems to have found a solution.

A handheld microphone just might be your best option if:

- You find headset microphones to be uncomfortable
- You are self-conscious about wearing a headset in front of others
- You like the idea of using a hand-held microphone with programmable buttons that additionally doubles as a mouse controller
- You dislike having to continuously don and remove your headset
- You need an easily portable microphone that you can take from place to place
- You take the time to arrange your hair just the way you like it and THAT IS HOW YOU WANT TO KEEP IT!

## Pros & Cons

### Nuance PowerMic III

MSRP: \$424

Accuracy: 98%

Noise Cancellation: 7 out of 10

Comfort: 10 out of 10

Overall Rating: 9 out of 10



#### Nuance PowerMic III Pros:

- 98% Accuracy
- Official Nuance Dragon Medical Practice Edition microphone
- Rugged construction and extra thick cabling
- No other handheld microphone comes close when it comes to the ease and flexibility of programming the buttons. The PowerMic III is also the first model to introduce the ability to program any NaturallySpeaking macro, third-party macro or personal command. Note that this feature is now included with the Philips SpeechMikes
- Antibacterial surface (similar to SpeechMike Premium)
- Optical mouse control (similar to Grundig SonicMic 3)
- The perfect microphone for network deployments because the PowerMic III application is automatically installed with Dragon Medical

#### Nuance PowerMic III Cons:

- 90 day warranty
- More expensive than competitive units

### Nuance PowerMic 4

- Slightly more comfortable, introduction of the touchpad & slightly more accurate

MSRP: \$424

Accuracy: 99%

Noise Cancellation: 8 out of 10

Overall Rating: 9 out of 10

#### Nuance PowerMic 4 Pros:

- 99% Accuracy
- Official Nuance Dragon Medical Practice Edition microphone
- Rugged construction and extra thick cabling
- No other handheld microphone comes close when it comes to the ease and flexibility of programming the buttons. The PowerMic III is also the first model to introduce the ability to program any NaturallySpeaking macro, third-party macro or personal command. Note that this feature is now included with the Philips SpeechMikes
- Antibacterial surface (similar to SpeechMike Premium)
- Optical mouse control (similar to Grundig SonicMic 3)
- The perfect microphone for network deployments because the PowerMic III application is automatically installed with Dragon Medical

#### **Nuance PowerMic 4 Cons:**

- 90 day warranty
- More expensive than competitive units

#### **Philips SpeechMike Premium Air SMP4000**

MSRP: \$395 - \$409 (wireless)

Accuracy: 99%

Noise Cancellation: 8 out of 10

Comfort: 10 out of 10

Overall Rating: 10 out of 10



#### **Philips SpeechMike Air & SpeechMike III Pros:**

- Same as wired model but wireless with a 16 foot range

#### **Philips SpeechMike Premium SMP 3700/3710**

MSRP: \$335 - \$349

Accuracy: 99%

Noise Cancellation: 8 out of 10

Overall Rating: 10 out of 10



**Philips SpeechMike Premium SMP 3700/3710 Pros:**

- 99% Accuracy
- Doubles as a desktop TableMike that can be used from a distance of up to 4 feet when combined with the complementary KnowBrainer TableMike adapter ([KnowBrainer Website Store Exclusive](#))
- Recipient of Nuance's highest 6 Dragon rating
- Very well constructed including lots of informative lights
- More sensitive than any other handheld microphone (longer-range)
- Improved signal-to-noise ratio over other Philips handhelds
- Jar/bump free-floating decoupled microphone element
- Antimicrobial housing
- Like the PowerMic III, the LFH 3500 allows you to program any Dragon factory or end-user commands into the programmable buttons.
- Built-in high precision "CLICKABLE" stainless steel laser scanned self lubricating removable trackball
- Largest playback speaker in its class
- Automatic microphone mute when setting on a flat surface
- Integrated pop filter
- Programmable buttons can be used to program any Dragon factory or end-user personal macro (like the PowerMic III)
- Auto volume control (increases or decreases volume input as you move in or away from the microphone)
- 1 year manufacturer warranty

**Philips SpeechMike Premium SMP 3700/3710 Cons:**

- None

**Conclusions:**

*The 1<sup>st</sup> 2<sup>nd</sup> and 3<sup>rd</sup> positions were almost a three-way tie with 3 clear winners but in the end, we came up with the following:*

**1st Place ~ Philips SpeechMike Premium LFH-3500/3510 & Premium Air SMP4000 and 4010 ([Click to See](#))**

Philips and Nuance currently dominate the handheld microphone market but Philips raised the bar by introducing dual speaker improved noise filtering, antimicrobial housing, automatic mute, the best accuracy of any handheld microphone, flexible long range jar proof microphone element, largest playback speaker, desktop stand for hands-free use (**KnowBrainer exclusive**) and an integrated pop filter. The LFH 3500 is also less expensive than the Nuance PowerMic III. Additional manufacturer information available at [www.dictation.philips.com](http://www.dictation.philips.com)

**2nd Place ~ Nuance PowerMic III ([Click to See](#))**

Unlike other handheld microphones, the PowerMic III doesn't require installing a configuration utility because it is already built into the Medical versions of Dragon. Our favorite feature is the idiot proof button programming tab. Programming is as easy as typing the name of the command you wish to deploy and you are not limited to a handful of Dragon functions or hotkeys, as with all other handheld microphones. We especially like the new optical mouse control, antimicrobial surface and desktop stand for hands-free use (**KnowBrainer exclusive**). We had to subtract points for Nuance limiting this microphone to just the Dragon Medical, DPG 14 and DLG 14 of Dragon along with a 90 day warranty. Additional manufacturer information available at [www.nuance.com](http://www.nuance.com)

I feel it's important to point out that all of these microphones worked exceedingly well in Dragon.

This review was dictated with the Philips [SpeechMike Premium Air SMP4000 Wireless and USB Handheld/TableMike](#)

## **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 Digital Recorder Face-Off](#)  
[KnowBrainer Wireless Microphone Face-Off](#)  
[KnowBrainer USB Soundcard Face-Off](#)

## **Current Gold Standards:**

The following is a list of speech recognition add-ons that we consider to be #1 in their microphone categories

*Best Wireless Microphone = [Shokz OpenComm UC](#) Bone Conduction Bluetooth headset*  
*Best Handheld USB Microphone = [Philips SpeechMike Premium SMP3710](#)*  
*Best USB TableMikes = [SpeechWare](#) (TravelMike, 3-in-1 & 6-in-1)*  
*Best Wired Headset Microphone = [Addasound](#) (single ear & stereo)*  
*Best USB soundcard = [SpeechWare MultiAdapter](#)*  
*Best Digital Recorder = [Olympus DS-9500](#)*  
*Best Speech Recognition Application = [Dragon 16](#)*  
*Best Dragon Command Utility = [KnowBrainer 2022](#)*

*[Lunis Orcutt](#) - Developer of [KnowBrainer 2022](#)  
 Founder of [KnowBrainer Speech Recognition Forums](#) (the world's most popular speech recognition forum)*

*[Chat Live](#) w/a Microsoft/Nuance Certified Speech Recognition Solutions Provider or call (615) 884-4558 x1 to speak with the world's most insufferable egotistical "so-called" speech recognition expert*

*Edited by Big Haired Lady (barefooted shotgun wedding wife since 1977)  
 When you visit <https://www.knowbrainer.com>, keep in mind that the baby needs shoes*



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