

SpeechWare USB MultiAdapter

User Guide

A comprehensive guide to setting up and using the SpeechWare USB MultiAdapter



A publication of Speech Recognition Solutions, LLC

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SpeechWare USB MultiAdapter: User Guide. A guide to setting up and successfully using the SpeechWare USB MultiAdapter

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Congratulations on your purchase of a SpeechWare “USB MultiAdapter”. This is a uniquely manufactured and functioning external USB sound adapter developed specifically for the high demands of the speech recognition user.

What it does:

If you are new to the concept of an external USB sound adapter, in the broadest terms this device is designed to replace the on-board sound card on your computer and is intended to accomplish the analog-to-digital conversion going into your computer and the digital-to-analog conversion for sound coming out of your computer.

The MultiAdapter hosts some unique technology not found in any competing product and which adds up to both extremely solid performance and some special capabilities.

Consider some of these unique features:

Close Range Performance: When used in the short range or blue mode, the device simply employs a high degree of digital sound processing (DSP) to reject obvious and repetitive external noise. You might use the MultiAdapter as a short-range microphone if you use it with a headset microphone which is positioned very close to your mouth. Or you might attach a short snub-nosed microphone directly to the MultiAdapter and attach it to your computer with a USB extension cord and as a hand-held microphone. In either of these examples you will want to set it for the blue or close mode since you will be positioning your mouth just an inch or two from the microphone.

Long Range Performance: The long-range or green mode is designed for situations when you intend to speak at a significant distance (typically 10-20 inches) from the microphone attached

to the MultiAdapter. When used in this mode, the MultiAdapter introduces the following features to provide the highest possible transcription quality in this special context:

- Auto Gain Control (AGC), through which the chipset automatically detects the voice volume input and adapts to it by increasing or decreasing the mic input volume
- Automatic Mute, through which the device sets a threshold for the device to only output the signal when the volume reaches a certain level. This means that when you are not talking the device will mute automatically.
- Speech Equalizer (SQ), through which the device filters a certain range of frequencies to focus on human voice and allows it to discard external noises as for instance keyboard typing while dictating and other background ones. This is the reason why your voice sounds a little bit too “metallic” when playing it back a voice recording.

Since all these functions are accomplished through a proprietary chipset, the device does not burden the CPU and impact the latency of the recognition process; in other words: fastest possible transcription, which is rather important for professional users!

Examples of use of the MultiAdapter for a long-range application would be combining it with the TwistMike which will not be positioned close to your mouth, or turning it into a “TravelMike” by attaching a snub nosed microphone to the adapter and positioning the adapter directly onto your computer or a USB base. In both situations you want to employ the features present in the long-range (green) mode.

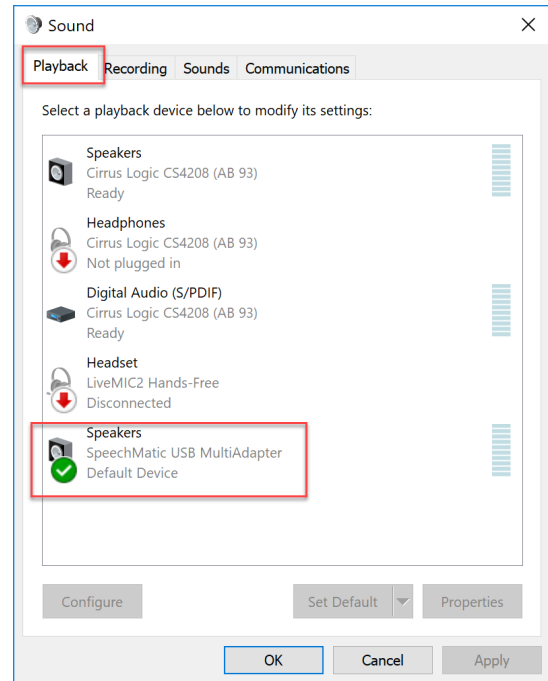
Windows Installation & Setup

Set-up for the MultiAdapter is straightforward, since all needed drivers are contained within current operating systems and are automatically installed upon insertion of the device into an available USB port. It requires no driver downloads and is both Mac and Windows compatible.

Insert the MultiAdapter into an appropriate USB port on the notebook computer. Connect the cable to a **DEDICATED** USB port on the computer. Ideally do not use any other USB cable or a multiple USB Splitter or USB Hub device to connect to the computer. The power light (LED) of the MultiAdapter unit will light up in **Red**. If the unit does not initialize - check that the USB connectors are properly inserted at both ends.

1. Wait a few seconds for *Windows*[®] to automatically install the corresponding USB sound drivers. You may or may not see message or dialog boxes.
2. After completion of the installation, *Windows*[®] will select the '**SpeechMatic USB MultiAdapter**' as the default Recording and the Playback Device, and will make it the default for all microphone-in and sound-out functions.

3. A note on sound-out: If you do not have a speaker or ear set plugged into the sound out jack of the MultiAdapter **you will not hear any playback through your notebook speakers or speakers plugged into your notebook sound out jack.** This is because the MultiAdapter became the automatic default sound-out device but has nothing connected to it. Deal with this either by plugging your speaker or headset sound out plug into the sound-out jack on the MultiAdapter, or set another device to be the default sound-out device. To change this setting, with *Windows® 8 or 10*, go to your sound control panel (Control Panel > Sound) and click on the Playback tab and choose any other available playback device. To select the alternative device, right click on it and select “Set as Default Device”



4. If you plan to listen to sound by means of an ear-set or speakers plugged into the MultiAdapter sound out jack, you need do nothing further. Simply plug the listening device into the headphone jack on the MultiAdapter.

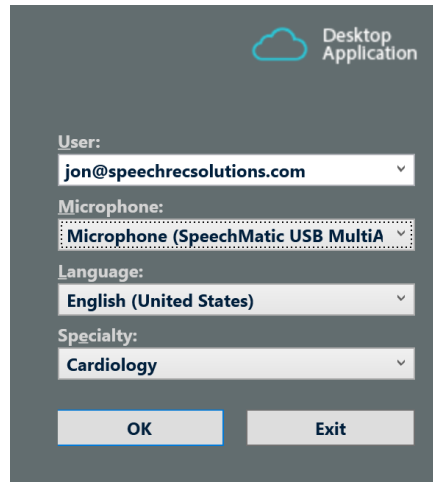
Dragon Set-up

Set-up of the MultiAdapter (and associated microphone) with Dragon depends upon the version of Dragon you are using. We will therefore separate this discussion into three parts: Dragon Medical One, Dragon 15 versions, and older versions of Dragon NaturallySpeaking.

Dragon Medical One:

If you are using your MultiAdapter with the new cloud-based Dragon Medical One (DMO), set-up is simple.

- If running DMO locally on your computer (not through Citrix or other Remote Desktop software), be sure that your TravelMike is plugged in before logging onto DMO and you will see it as an option as you log on:



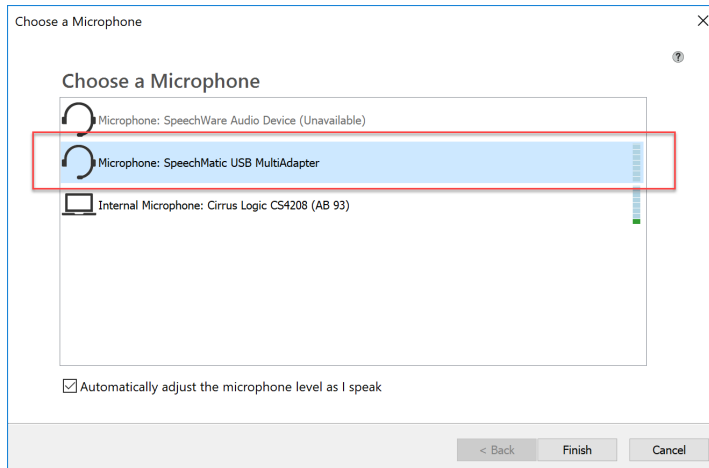
- If you are running DMO through Citrix or another virtualization process in which the DMO application is actually located somewhere other than your computer, be sure you have plugged in your device before starting DMO and also be sure to select it as your preferred recording device from the Sound control panel. If it isn't already the default device, right click on SpeechWare SpeechMatic MultiAdapter from the Recording tab and select "Set as the Default Device".

Dragon 15 Versions

"Dragon 15 Versions" refers to Dragon 15 Home, Pro, Legal, and Dragon Medical Practice Edition 4 (DMPE4). For all of these versions, integrating the MultiAdapter into the software is a breeze. Follow these steps:

1. Insert the MultiAdapter into an available USB port and if necessary, allow needed drivers to install (only required the first time)
2. Open your version of Dragon and if you have multiple user profiles on the software, select your preferred profile.
3. Dragon will notice that there are multiple sound cards available (the on-board sound card and the MultiAdapter associated with your TravelMike, and perhaps others) and will query you as to which sound device you want to use.

4. Select SpeechWare SpeechMatic USB Adapter and then click finish. See image below:



Older Version of Dragon (Pre-Version 15)

If using a new MultiAdapter with older versions of Dragon NaturallySpeaking, you have several options in terms of how to integrate your microphone with Dragon:

- a. Simply substituting the MultiAdapter (with microphone) for your old mic and running the audio set-up wizard
- b. Adding the MultiAdapter as a new “source” to an existing profile**
- c. Creating an entirely new user profile based on the TravelMike

Of these options, we consider the middle option the best, both because it allows you to save all the personalized words and commands in your current profile, and yet still afford you the opportunity (based on the version of Dragon you are using) to do some limited reading and training with the new microphone.

Here is the basic process based on Dragon version:

Dragon 11 or 12	Dragon 13 and 14
<ol style="list-style-type: none">1. Select Dragon > Open User ..2. On the far right of the Open User dialog, click on “Source” and then “New”3. Select the new source (TravelMike) from those listed and follow subsequent instructions	<ol style="list-style-type: none">1. Select Manage Dictation Sources from the “Profile” menu.2. Click “Add new dictation source”3. Follow all subsequent instructions

Mac Set-up

Preliminary Setting Tweak: Although the MultiAdapter is essentially a “plug-and-play” device, following insertion of the device and allowing a minute or two for drivers to be installed, the following brief adjustment is recommended when preparing to use a MultiAdapter with your Mac:

1. Go to the Utilities folder in your Applications folder, and launch 'Audio MIDI Setup'. Select 'SpeechMatic USB MultiAdapter' from the list of devices.
2. Click on the 'Input' tab, then choose '44000.0 Hz' and '1ch-16bit' from the Format menu.



3. Quit the Setup

Dragon for Mac Set-up

Because of the unique "auto-gain" technology on the MultiAdapter, it is recommended that you follow the procedure listed here when doing the initial microphone set-up when using it with Dragon Dictate®. This is necessary in order to give the TableMike time to achieve maximum sensitivity before initiating the volume setting procedure.

- Choose Tools > Microphone Setup to calibrate the MultiAdapter™
- Click on the red icon to enable the microphone
- Wait 30 seconds in silence until the gain setting reaches the maximum level of 99

At this point, start reading the text to have Dragon Dictate® adjust the MultiAdapter's volume properly

After following the above procedures you can expect excellent results with any of the SpeechWare microphones.


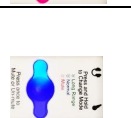

Device Operating Instructions (all operating systems)

Controls: The SpeechMatic USB MultiAdapter has several key components, including

1. Microphone input jack
2. Sound out jack
3. Push button

4. LED indicator (under the push button)

LED Indicator: The LED indicator will be either green, blue or red and indicate the following states:

Red	Muted: Microphone off and no sound passed to computer	
Blue	Normal: Close range; ideal for use with headset microphones.	
Green	Distant: 10-20-inch range; ideal for use with mini-boom on notebook	

Push Button Use:

- A short depression of the push-button cycles between the active (on) state for the microphone (either green or blue) and the muted state (red)
- A long push of the push-button will cycle between the blue and red modes

(Note: you can cycle between the two modes only when the device is in either of the active modes; you cannot change modes when the device is in the muted state)

Normal versus Distant Mode:

Normal Mode: When in the “normal” mode, the MultiAdapter does not employ the auto-gain, Equalizer or mute technology and should be used with a distance of about one inch between the user’s mouth and microphone element. In this mode you will have the most intense rejection of external noise, but the least amount of freedom in terms of distance from the microphone

Distant Mode: In the distant mode, the MultiAdapter employs the full measure of auto-gain technology and allows practical usage from distances between 10 and 20 inches from the users mouth to the microphone. In this mode the MultiAdapter will also employ the greatest amount of digital signal processing to reject external noise. As a result of this intense processing you will also notice a somewhat hollow sound to your voice when played back.

Mode	Normal (Blue)	Distant (Green)
Operating Range	1 - 3 inches	10-20 Inches
Auto Gain	Minimal	Most Intense

External Noise rejection	High	Moderate
Playback Sound Quality	Most Natural	Artificial sounding
Ideal Usage Situation	Moderate or high noise	Low ambient noise
Comments	Best setting in moderate or more noise	Best if low noise; most convenient given distance flexibility

Frequently Asked Questions

Will it work with any microphone? Generally, yes. We don't like its performance with the Sennheiser ME3, but this is because the ME3 is now being made with a terribly insensitive microphone element and is not compatible with most USB adapters. Every other microphone we have tested with the SpeechWare USB MultiAdapter has worked fine with it.

Is this the same part used in the SpeechWare TravelMike? Yes, this USB adapter is the guts of the TravelMike with an added right-angle USB adapter, snub-nosed microphone, and vinyl case. If you already own the MultiAdapter and want to turn it into a formal TravelMike, you simply need to purchase the SpeechWare TabletMike and the 90-degree USB adapter.

Why is this USB adapter so much more expensive than most other USB adapters? There are two reasons. First, there is a lot more engineering in this device than others out there. This includes both the auto-gain technology used when in the "distant" mode, and also the high degree of digital signal processing when in either mode. No other USB adapter on the market includes the choice of a "near" and "far" mode. The second reason is one of economy. This device was designed from scratch by SpeechWare for the speech recognition community and is sold primarily in this venue. It is manufactured in much smaller production runs than other adapters, so the unit cost is higher.

Are there disadvantages of this USB adapter? Beyond the cost, no.

Why is the short USB extension included with this device? Is it necessary or recommended to use this? The short USB extension cord is designed only for logistical reasons if you don't have the space for it to be sticking out of your computer or if you prefer to have some "strain relief" in the attachment to a USB port. The short USB extension cable does not impact the performance of the device in any way.

If anything goes wrong, does this adapter have a warranty? Yes, if you register with SpeechWare, the adapter comes with a 2-year warranty. Without a registration, the warranty is only 1-year.

Will this work with my mobile phone or tablet? Although you can find adapters that will allow you to connect this device to a 30-pin or lightning connector on an Apple device, or the mini USB device on your Android device, in general these devices will not provide enough power for the circuitry in the USB adapter. So no, in general this device will not work with your mobile device.