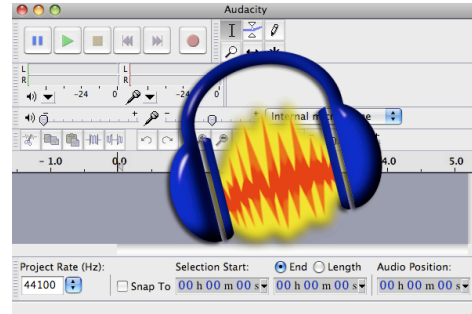**Tech Talk**

Home Recording Studios, Part 3 ©

by John McCarthy

Hi and welcome to the third and final part of this Tech Talk, offering a personal and very brief look into the expanding world of home recording studios. We've already spoken about microphone patterns, condenser and dynamic microphones, with a few recommendations, and today we're devoting the programme to audio interfaces and recording software.

Audio interfaces are what you connect your XLR-cabled microphones and other audio gear into before connecting to your computer. If I may employ a very simple analogy, when you wish to converse with a foreigner and neither of you have a common language, you have to use the services of a translator or interpreter so that you can exchange information both ways, and that's exactly what an audio interface does. Notably, it converts analogue signals into the digital audio information that your computer can process, and can perform the same process in reverse, receiving digital audio information from your computer – as for instance, voice or music - before converting it into an analogue signal – which you can hear through your monitors, speakers or headphones.

Audio interfaces are generally connected to computers through USB, FireWire or thunderbolt connections. For years, FireWire was the standard for high-speed audio interfaces and was found almost exclusively on Mac computers. USB 2.0 has recently become more popular, and features mainly in the entry-level audio interfaces which have the benefit of being extremely affordable and quite frankly are good enough even for creating professional audio. Focusrite, Pre Sonus, Avid and Apogee all supply perfectly adequate models. Thunderbolt is the new kid on the block, offering by far the fastest speeds and although now universally found on Macs, is typically intended for the higher-priced systems costing thousands of Euros. Among the more affordable, you'll find models by the likes of Zoom, MOTU and the Focusrite Clarett series.

Analogue connections on audio interfaces come in a wide variety of format, and the most common are XLR, quarter inch jack and RCA connectors. Most include in-built microphone preamplifiers, and this removes the need to buy additional hardware. Try to ascertain how many inputs you'll need – for example, if you're going to record just a voice and guitar separately, then two inputs are enough, whereas if you're thinking along the lines of voice, guitar, piano and another instrument, then you'll need four. Usually, the greater the number, the more you'll have to pay. Bear in mind that most two-input interfaces are bus-powered, which means that you don't have to plug them into the mains and are ideal for mobile use. With larger interfaces, you'll be manacled to the power outlet.

Finally, let's have a quick look at DAWs; that's Digital Audio Workstations, the piece of software that allows you to record, edit and produce audio files. Prices range from free to thousands of Euros, and if you purchase an audio interface, most will include a free 'light' version of professional software. I know that many of my colleagues here at EnglishWaves use and swear by Audacity, which anyone can download completely free, and is a cross-platform application, which means that there are versions for all major operating systems. It also happens to be extremely powerful and versatile. It can be employed to record vocals, instruments, sound effects, mix them all up, create podcasts and music mixing, multi-track recording, and many other things. If you're willing to roll up your sleeves, apply the elbow grease and learn all it has to offer, you can obtain some excellent results. I know some professionals who use Audacity's fading-in and fading-out possibilities, mixing several tracks together with sound effects for podcast creation. Business owners who do their own voice-overs and adverts for use on local radio; Young (and old!) musicians who record themselves on multi-track and send their demos and audition pieces to music professionals.

Here at EnglishWaves we have a pedagogical service specifically designed to help those wishing to improve their English, so you could subscribe to our services, listen to original podcasts with the script and then with Audacity record your voice reading said script, play back, listen to yourself and objectively analyse where you could make improvements to your pronunciation and intonation. Cross my heart and hope to die, I'm not getting a commission for this.

Personally, I use Adobe Audition because it's more powerful, offers more in the way of tools and control over multi-tracking, and having to work with videos as well, allows seamless workflows with Premiere Pro. There are many other DAWs, such as Pro Tools, Ableton, Logic Pro for Mac and Steinberg to name but a few, but if you're already

thinking about moving up to these, it's almost certain that you aren't listening to Tech Talk at this moment in time.

Hope you've enjoyed this series on home recording studios. As you can see, access to this has become very affordable over the last few years, especially for aspiring adolescents who're thinking of perhaps having a go and making it a career, to pensioners looking for new hobbies. That's it for now; join me for another edition of Tech Talk next week here on EnglishWaves.fr.