Analog To Digital Converter Tutorial – [AD/DA Converter] – The Reason It’s So Important

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Many people don’t really know the importance of the audio Analog to Digital converter.

An AD/DA converter is converting the analog audio signal to digital. But why is this conversion necessary?

Let me explain.

What Does An Audio Converter Do

Our computer “lives” in a digital world with 0 and 1 commands.

When we record audio – an electric guitar for example – we transfer the sound from the real world (or analog if you wish) to our audio interface.

Our audio interface now needs to send the signal to our computer’s CPU but our computer won’t understand this signal since it’s analog.

For this reason our audio interface has a built-in ad/da converter that handles the conversion.

They “translate” the audio signal from analog to digital so our PC/MAC can recognize it.

The Importance Of The Analog To Digital Converter

If you’ve ever asked yourself the reason why a sound card that has only 1 Input costs hundreds of dollars more than a sound card that has multiple inputs, then these are the reasons:

While this conversion takes place the audio signal may get altered depending on the quality of the converter.

The better the converter the better the final outcome that you’ll hear coming out of your speakers.

Cheap Converters = Bad Audio?

Living in 2013, the technology that an analog to digital converter has is really superb.

While you can hear a difference comparing a sound card with a $1,000 converter to a $150 converter, that doesn’t mean that the audio will suck. No, it won’t.

Nowadays, even the cheapest converters will do the job without a single problem.

As I always say, the person behind the mixing console is the one that makes the difference and not the gear that the mixing engineer owns.

Why would you need to buy expensive equipment if you won’t know how to use it?

Firstly, spend some time improving yourself and then improve your gear. Happy mixing!