MUTEC MC-3+ SMART CLOCK USB

Jittered out

Ex factory, current converters mostly sound very good. But Berlin company Mutec believes that the bar can be set even higher – and presents the MC-3+ Smart Clock USB as a proof.

The conversion from analog to digital signals – and vice versa – is something that most people do not even think about and yet the transmission of audio in or out of the digital domain is a rather complex process in which a lot can go wrong. There is a devil in the digital detail, and its name is jitter.

What is jitter?

When a continuous analog signal is transferred into the digital world, this happens through a series of "samples": to obtain CD quality for example, 44.100 samples per second are taken from the audio signal. A D/A converter then reconstructs from them the analog waveform. Therefore, it is important that the samples have to be as exact as possible because otherwise temporal deviations can emerge during the reconstruction of the analog wave, which distort the signal. Summarized, a digital data stream with jitter problems generates an acoustic impression with a considerably diminished spatial effect. Jitter can arise

through all kinds of influences – and Mutec can remove it with the MC-3+ Smart Clock.

Features & Sound

The MC-3+'s width is 9.5 inches and its height is 1 rack unit. On this small space, it offers on the back, next to the USB port, options for AES3 respectively AES11 via BNC or XLR as well as coaxial and optical S/PDIF connectors. In addition, the MC-3+, being a clock generator, features of course outputs for Word Clock and can also be externally synchronized to other clocks via an Word Clock input.

On the MC-3+'s front, all settings can be made via two push buttons while LED columns indicate the respective configurations. Something you need to get used to is the way of displaying in-between status modes while two LEDs are lit. However, it will not take long until you appreciate how Mutec was able to house this much information on so little space.

Most exciting is, of course, how the MC-3+ handles the sound. Is it worth to purchase an external clock? When listening to the test, you soon realize: even with a good converter, the use of the Mutec clock makes sense. The stereo image becomes clearer and the sound becomes more spatial. If you already own a high quality converter, you should be aware that the clock does not create a night-and-day difference. However, once you have taken the step, there is no going back.

Conclusion

At roughly a grand (in Euros), the new Mutec clock is not necessarily a bargain but it can significantly improve the sound of digital signals even in high-quality setups. Anyone who wants to work with DSD or high-resolution PCM, who needs a conversion of various digital formats and intends to upgrade their conversion chain by yet another step, will surely not regret the purchase of the Mutec MC-3+ Smart Clock USB. ▣

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