

## Nanotechnology

Test: Mutec REF10 NANO | Masterclock Price: 1.999 Euro



## Quotes:

Next up was a somewhat outdated audio interface called 896mk3 from US company MotU. This acquired a new lease on life as soon as the Mutec MC3+USB imposed its clock signal. This significantly broadened and deepened the soundstage and generated greater image focus which was impressive with symphonic orchestra or church organ. The treble too responded positively by appearing a lot more transparent and clear during impulses. That all was dandy but not really that novel relative to other high-quality clocks I'd previously connected to the MotU. The real difference maker was Nano. I didn't expect the delta between the already high-quality clock of the MC3+ and Nano's 10MHz clock to be this noticeable. In fact, things seemed to take a big step forward in music. The phantom centre between the speakers appeared even more clearly tangible and recorded reflections more cleanly separated from their images.



• For the MotU interface, clocking via Nano was the ultimate stem-cell rejuvenation. In a blind test I'd no longer recognize my MotU. The playback was that much better.

• The results with several devices in the price range of a few hundred euros proved that their internal clocking was the main weak point in the sound of cheaper older converters. This is how the current audio interface Clarett by Focusrite quite literally blossomed. The success of Mutec clocking on my two Lavry converters was also clear though somewhat less far-reaching. This also reiterated how Nano eclipsed the MC3+ USB. In particular the bass range which sometimes minimally floats on the DA11 felt a lot firmer with Nano clocking it.

• Even as a pure clock the Mutec system made a clear difference but things got particularly interesting when the MC3+ played USB interface and also supplied audio signal. During the test I was able to see directly how the performance of the already good clock of the MC3+ USB was significantly improved by the additional connection to Nano.

Phone: +49(0)30-746880-0

1/2





## **Conclusion:**

In the consumer hifi sector, clocking is seen as one of the last optimizations for the playback chain. In the pro sector however, it is a technical necessity due to the number of digital devices that must be sync'd to a shared clock.

In fact, external clocking in the home can achieve much more than a final touch. The improvements can be downright substantial. I would like to say that a good stable clock can do more than any cable. That's why I recommend trying external clocks in your own system. Even where they only control streamers or other digital transports without D/A conversion, something can really happen. The sonic gains are usually noticeable, sometimes even overwhelming.



I actually like to avoid the term but it probably fits here: these Mutec clocks are secret weapons on the path to audio system optimization and the perfect sound.



In any case, Mutec's REF10 Nano showed a clear dimensional improvement in the soundstage and in most cases there were also significantly tighter highs and often crisper bass. With this clock, Mutec produce a reference device made in Germany then charge anything but a ludicrous price for it. If one of your digital devices has no 10MHz input, I recommend the combination with the Mutec MC3+ USB.

