Re-Birth

By Tasos Karagiannidis & Paris Kotsis





Providing the most optimal computer signal to our DAC

reat news for computer audiophiles everywhere. The news are coming from the Greek Company Ideon Audio and its chief designer Mr. Vassilis Tounas. The Athens-based company has experienced success and recognition by dint of models such as its Ayazi DAC and Absolute DAC. We reviewed the evolution of its 3R USB Renaissance, which raises the bar quite high. The 3R Master Time isn't a USB DAC. Its objective is to improve the "dirty" signal of our computer to arrive "clean" and pure in our DAC. This way, the DAC can perform a far better conversion of the digital signal, so we won't have to change either our computer or the DAC.

Whilst raising the bar on quality, so too did overall size increase. It's no longer a pocket-size gadget, but a full-sized device with a metal chassis, a one-centimeter-thick aluminum face plate, and four metal feet. This "mediator" performs triple

TIPS & TRICKS

TIP 01 No special drivers are needed for 3R Master Time. Simply connect and play.

TIP 02 If not required, it is recommended that the 5V switch is set to "off."

duty: Re-drive, Re-clock, and Re-generate (hence, 3R). The signal enters a USB line correction circuit, to eliminate, via a Texas Instruments (TI) re-drive chip, anomalies (in the signal) caused by the USB port itself. From there, the signal is directed to the main data caching circuit — a data buffer, that is — where it is released from the computer clock and re-clocked by a very low jitter femto precision oscillator. There, again, it is re-driven by a second re-drive circuit. The power supply is linear with very low noise and is specifically designed for USB-level signals. It has three separate internal power supplies and locally there are three voltage stabilizers for the critical points of the circuit. Hi-end organic polymer Panasonic capacitors dominate the 3R Master Time's spartan yet orderly inner world. One of its core functions is to electrically isolate the DAC from the computer and its power supply, which is also mainly responsible for grounding noise that afflicts computer audio fidelity. Some USB DACs, however, require a 5V power supply for the USB to function. No problem: simply flip the switch marked "5V" to the "on" position and the device will be supplied with its own clean current. We asked Mr. Tounas if there is galvanic isolation of USB, which several companies and audiophiles regard as critical to improved reproduction. The answer was unexpected: It is consciously not chosen because after

many tests (jitter measurements) and musical auditions, the results were very

Inside, there is a digital modular core based on a TI processor. It is essentially a USB distributor that is also open to future upgrades. In terms of usability, the 3R Master Time is very simple: there is a USB B input port, a USB A output port, a toggle switch for 5V, a toggle on/off power switch and ... nothing else. And we connect the cables, power on the source and the DAC, and expect the three LEDs on the front panel to light in order to commence our listening journey. The "Power" LED indicates whether we have power, the "Lock" LED indicates a successful connection to the DAC, and the "Host" LED indicates a connection to the computer source. Basically three, two, one, and off we go!





MUSIC

Because of its small depth, the 3R Master Time will sit on a shelf relatively easily; however care must be taken during use: due to its metallic feet (now the company has changed with with rubber), the unit glides and could, by accident, become airborne. For the acoustic appraisal of Ideon Audio's high-end USB signal conditioner, we followed two different paths with regard to the source. Initially, we used the digital output of a Pioneer XDP-02U player and subsequently portable replaced it with a standard quality Toshiba laptop. In both cases, the converters used was the iFi Pro iDSD, with zero feedback tube and the Gibbs Transient Optimized filter. We listened to the sources only with the DAC first, and following we connected the 3R Master Time between DAC and source, in order to discover potential differences. The system we used for listening, was based on the Atoll IN300 and the ATC SCM 70SL, which made it possible to accurately reveal the effects of the Ideon device on the source signal. The first and fundamental observation we must make is that the USB signal genuinely needs "conditioning." Initially, in both cases, there was a tendency of emphasizing frequencies between the mid-range and treble/bass, giving a more "playful," cheerful dimension to the program. In certain, very revealing systems, without the Ideon 3R Master Time this gives the impression of phase discontinuity, over-projecting affected areas. This may be appealing to some, particularly with MP3 material, but it remains a tonal interven-

Tweet This

Built exclusively to "take care of" USB ports, 3R Master Time holds a magic wand and remarkably changes our sound, allowing our converter to reach much higher levels of performance. Especially if you choose to use exclusively a computer of typical quality as a player but have invested considerable effort and money in a good system, Ideon's top conditioner will allow you to realize its full potential, without changing the source.

tion. This was more intense with the laptop than with the DAP and disappeared straightaway when the 3R Master Time was connected to the chain - where we isolated it acoustically, as for the first time we were entirely released from it. Our speakers were instantly "relieved", by pitching these frequencies more accurately on the sound stage, while the whole frequency spectrum was rendered with greater coherence and improved perceptible range in high frequencies and lower bass. Imaging, as well as the height and the depth of the sound stage were also expanded making the music flow smoother and more natural. Simply put, the music from the USB ports lost its somewhat "consumer-grade" properties and became distinctly more high-end. A noteworthy impact was also evident in the matter of noise, which was intense with the laptop but far less so with the DAP. Average-quality computers leave "turbulence" across the spectrum, reminiscent of an electromagnetic noise effect, which easily passes through converters and distorts the music. The 3R Master Time significantly reduces this phenomenon to the point one wouldn't necessarily notice it, though it cannot be eliminated from the computer. With the Pioneer DAP, however, the device performed miracles: eliminating the noise to such an extent that we went utterly slack-jawed over the deep, rich texture, the endless resolution, and the crystal-clear quality that provided to the iFi converter. The latter, with the presence of the 3R Master Time, not only reinforced its virtues, but finally lost its slightly fun character, becoming totally "velvet" and reaching absolute levels of reference, with amazing resoluteness of content, reminding us of only top-line converters, such as the Auralic Vega G2.

We would say the high cost of the Ideon 3R Master Time is entirely justified since, in terms of performance, is added to our DAC's value, provided the latter is of a high standard and is a part of a very revealing system. Perhaps the price makes it a "toy" for few, but it is not "yet another fairy story" since it quite literally broadens the limits of state-of-the-art digital reproduction. Consequently, we are gratified that all this issued forth from Greek hands and minds!

Ideon Audio 3R Master Time

Specifications

TYPE: Digital USB conditioner **INPUT:** 1xUSB B

OUTPUTS: 1xUSB A

DIMENSIONS (WxHxD): 366x65x175 mm



- Quality of construction
- Effectiveness
- Ergonomics

• Metal feet slip easily (now provided with rubber feet)

Manufacturer: Ideon Audio CONTACT: +30-698-414-6057

ASSESSMENT

*****//4.90

PRICE: € 2,650





