

M2Tech Joplin MKIII: the phono becomes digital

by Marco Maria Maurilio Bicelli

Let's go back to Italy, precisely to Pisa, the home of M2Tech.

In short, when the good product is from your country, it is useless to hide it, we are all a happier thread and we hope that crazy policies will not make anyone run away.

SYSTEM

Turntable: Technics SL-1500 C, TEAC TN570

Pickups: Ortofon 2M Red, Ortofon 2M Bronze.

Preamplifier: Teac UD503

Amplifiers: TA2022 in dual mono, Connex Electronic CxD250, Anaview AMS 0100-2300.

Speakers: Audio Nirvana Classic 15 "Ferrite, Minas Rill.

Headphones: Shure SRH1840

CD player: TASCAM CD-200SB

DESCRIPTION

Aesthetically, the Joplin MKIII presents itself, like all the other elements of the Rockstar series, with a futuristic and spatial design. A box of just 20cmx20cm that proposes itself as a digital PHONO ... seems like a feat, but once opened, one cannot help but be fascinated by it. Everything is hyper-cured, both in layout and in quality. On the one hand we see the Phono Circuit and the A / D conversion section, on the other all that is needed to make the digital part work and process.

However even more than the hardware part, what is of great interest is the software part.

First of all we can choose between multiple equalization curves, in fact there are over 20 used between 1928 and 1954. We can also set various levels of gain, starting from a gain of 10db we can in fact reach a gain of 65db by moving in equal steps at 1db, this brings with it the possibility of using any head on the market, be it MM or MC. In addition, we can also set a gain of 0db, but this is because the Joplin MKIII is an excellent A/D converter and if we want we could easily use it to digitize any analog source, such as tapes, sound output from the mixer, sound output from a CD player... also because then we will try to understand what is the purpose of digitizing... for now we finish the description with a little suspension of the judgment.

With the Joplin MKIII we can also choose which format to digitize: PCM 16, 24 or 32bit? What if 16 or 24, with or without dithering? 44.1, 48, 96, 192, 352.2 or 384kHz? In short, we have everything under control, while remembering that the output higher than 24/192 is possible only from USB and I2S, and therefore to a computer, or to a DAC equipped with this input.

The fourth most interesting function is to be used in combination with the gain: it is in fact a saturation or clipping alarm if you prefer. Setting a low gain certainly leads to an absence of clipping, however a too low level leads to the absence of dynamics ... hence the possibility of signaling clipping when it does not yet exist, but is at high risk of existence.

In addition there are two filters that can be activated. The first is a high pass, or anti-rumble, which allows us to avoid unwanted noises, and can be set to 16Hz or 50Hz. The second is a low-pass, or anti-murmur, which by cutting at 5kHz or 10kHz allows us to listen to even very old recordings.

Let's go back to the question: why can a phono be used to record sources other than vinyl?

Essentially because the Joplin MKIII can be seen as an ADC with a phono function, it thus becomes a system that can also be appreciated for digitizing small concerts, or songs recorded in the studio, taking full advantage of the operational potential offered by digital recording. An ADC that is, in the small, also useful at home because with Joplin we can safely save any source in liquid format: even CDs, which is true that they are already digital, but that we cannot always copy directly to the

computer, also because today the computers are mostly free of players, be they CD, DVD, BD and BD4k.

In short, seeing it as an ADC allows us to understand that the phono part is certainly hifi, but that through digitalization it is possible to enhance the analogue by providing this with multiple useful functions that make the product almost immortal.

I know that many of you will get upset when they read these words, but you probably also need to start to understand what is the digitization of an analog signal and separate it from the idea of a synthesizer or a drum-machine. Digitizing the analog signal does not involve a coldness of sound or other strange and extrasensory things: it only means that a perishable signal is saved in an almost imperishable way.

The analog signal is made up of infinite points! Well my dear ... this is the theory, let's go down to the engraver's practice and we will see that these infinite points are missing a lot of the appeal. However, pending an article dedicated to this in the new year, I leave you directly to Marco's answers (Manunta CEO and founder of M2Tech).

Given that for me there is no "analog vs. digital" but only "good music vs. bad music", the Joplin MkIII was basically designed as a high quality analog interface to the digital world. For example: if a system consists of a DAC that acts as a preamplifier and this DAC does not have analog inputs (there are many), how can you connect an analog source to the system? An ADC is needed, and therefore it is the best possible! If the analogue source is the turntable (which is not uncommon), then all the better if the ADC is also a phono, so that you can do without the phono preamp and save some money ... Then there is the aspect of the ripping vinyl. Fans are well aware that every time they listen to a vinyl they spoil it a bit. To avoid or slow down this inevitable deterioration process, but also to make vinyl music portable (in the car, on vacation, in the office ...), cassette recorders were once used. I take an LP, record it and use the tape for "disengaged" listening or to enjoy my music in the car or on vacation. I reserve the LP for quiet listening and concentrated on the armchair in my living room. The same thing can be done through the Joplin, but with much higher quality: I rip an LP on the computer and transfer the files obtained on a USB stick or in the memory of my smartphone: so I can take my music anywhere and when I have friends for dinner I can use the files for the background music while having dinner. Not only that: if I have a second digital only system and I ripped the disc to 192/32, the copy is of very high quality and I still listen at high resolution.

Regarding the fear of "worsening" the analog sound, I would like to point out that the resolution and bandwidth of the Joplin are so high (when you choose to acquire at 192/32 or 384/32) that you can easily contain not only the musical message read from the turntable, but also all the colors and characterizations that the analog reading system adds to the sound of the music: engine rumble, wow and flutter, rubbing noise of the stylus in the groove, mechanical resonances of the base and arm, electric resonances of the head and cable: all aspects that the user unconsciously optimizes while striving to find the "perfect analog sound". Let's not forget that vinyl has a dynamic and a signal / noise ratio that, in the best of cases, touches 80dB, while the frequency response is hard to reach 30kHz and the separation between the channels does no better than 30dB. Using a system with 122dB of SNR, 75kHz of bandwidth and 100dB of separation between the channels assures us that, to put it in a somewhat dismal but effective way, the coffin is so much larger than the corpse that we certainly don't need to cut its legs. And we don't even have to undress him! On the contrary: we bury it with a stick, a favorite bible and also a walker ...

If the acquisition system is so resolving as to be transparent to the source, we do not lose anything of the analog quality of the original signal. On the other hand, vinyl aficionados today often listen to LPs produced by digital remastering of analog masters or produced by digital masters, and it doesn't seem to me that anyone objects to the sound of the ADC and DAC used in the studio for the remastering process, which obviously characterize the sound of the disc in a relevant way...

In short, our thinking is quite similar.

LISTENING

Despite everything that can be said theoretically (remember that theoretically the analog signal has an infinite resolution ... but that the theory collides with practice practically as soon as the blank page switches to reality) I believe that we must necessarily pass the test of facts: in this case, to listening.

I tell you with absolute peace of mind: once seated in front of my system that the Joplin MKIII was an ADC, it went completely into the background, even before asking questions and trying to understand what it was I sat down to listen. I knew there was an ADC, but I didn't know where it was located and I certainly treated it more by phono than by ADC.

In short, that the signal was digitized was not in the least audible. Indeed, it would be enough to listen to it once with a disc that is not exactly clean, which with your eyes closed you would not be able to say if the Joplin MKIII is an ADC or not. Rustling, tac and all the rums from wow were in fact very present, and not eliminated as a certain "antidigital" mythology would like.

Extremely wide and developed stage, details and micro-details present in a precise and harmonized way with a dynamca capacity from the first of the class.

CONCLUSIONS

There is little to say: it is one of the few times in which 2560 € does not seem to me to be a joke, but the right monetary proportion for a long-lasting product, of extreme quality and endowed with many facets that make it attractive even to a market professional.