M2Tech Marley MKII: small headphone amp ... great power

by Marco Maria Maurilio Bicelli

I know the first contact with M2Tech was not the best: the EVO electronics were a nice gamble and despite the fact that many liked them ... here on Estatica we did not use tones, nor flattering terms. Nonetheless, we immediately tweaked the Rockstars series, and the good Marco (Marco Manunta, engineer, mind and owner of M2Tech) did not deny us the proof.
https://www.estatica.it/es/letture/articolo/m2tech-rockstar-young-mkiii-il-dac-a-mezza-dimensione-che-lotta-coi-giganti
Now let's continue with the tests: we move away from the DAC and dedicate ourselves to a headphone amplifier, which also works as a preamplifier; that just like the DAC convinced me, enough to put it at the level of much more expensive amplifiers.

SYSTEM

Sources:
digital: self-assembled computer.
Analog: TEAC TN570, Technics SL1500
DAC: Teac UD503
Amplifiers: TA2022 in dual mono, Connex Electronic CxD250
Speakers: Audio Nirvana Classic 15 "Ferrite, Minas Rill.
Headphones: Shure SRH1840

DESCRIPTION

The Marley MKII reproduces exactly the design proposed with the Rockstars series: futuristic and with clean lines. It adapts, in my aesthetic opinion, to any room and lounge.
Its compact dimensions (https://lnx.m2tech.biz/products/rockstars/marley-mkii/) make it extremely light and compact ... unfortunately it lacks balanced outputs towards an amplifier; in fact, despite being completely balanced internally, it was not possible to insert two XLR outputs in 20cm.
Thus there are the balanced inputs, two unbalanced inputs and two unbalanced outputs. One of these has a fixed output, the other is a variable output and therefore suitable for final amplifiers.
Headphone side instead there is nothing to fear: the Marley MKII has an unbalanced and balanced output. The first one supplies up to 10V, the second one up to 20V ... but as you will see from the measurements, the interesting side is the available current.
Internally it is a gem! Neat and perfectly balanced. Note that the volume control is always done in the analog domain, but via chip, which solves any problem related to the potentiometers in one fell swoop.
I leave the rest of the words to the photos, but in front of so much precision and quality there is little to add.
However, in addition to this there are also less visible, though no less important, features.
Among these we can include the three-band equalizer, the automatic shutdown of the display, the balance between the two channels, the ability to set the volume steps to 0.5db rather than 1db, the ability to view the volume in db or in steps , the possibility of setting a given switch-on volume, the automatic switch-off of the appliance, the settings of the standby LED, the setting of various switch-on modes, the activation of bluetooth, the possibility of starting the firmware update and the fade control.
However the two of all seem to me the most interesting to analyze: the crossfeed and the possibility of setting three output impedances.
The crossfeed is a function that allows you to take part of one channel and send it, properly calibrated, to the other channel. In this way recordings with an excessive separation between left

and right manage to sound much better: with a less psychedelic headroom ... it is called the ping pong effect, but I assure you that with the sport of table tennis it has nothing to do , given that this sport is composed of precision, grace and improvisation.
The three output impedances, on the other hand, are a gem that in my opinion makes the Marley MKII much more fun than many of its colleagues.
Technically we can choose the output impedance that best suits the headphones we use ... however in my opinion choosing between 0, 10 or 47 Ohm is not only attributable to the technique. In fact, if I had preferred darker shades I could very well have chosen greater impedances.

LISTENING

Well when I started listening I hadn't checked the output impedance ... too dark, too low for my taste, there are those who would get excited, but I'm not of this type. From 10Ohm I went to 0Ohm... ok it's a theoretical 0, but who cares, we all know that the 0 does not exist... the Marley MKII started playing just the way I like it: clear, precise, bright and clear .
In a few moments I said to myself: ok I can listen to it without my efforts, if not to check the fact that subjectively it is a pleasant product to me.
The Marley is an extremely precise and detailed headphone amp, fast in the transients, but at the same time equipped with quality bass ... in fact it has three basses: first of all there are those "as I like them" never covering , without tails, dry and particularly live, secondly there are basses "as I don't like them" extremely evident, dark and with some tails.
In short, it is a headphone amp that potentially can appeal even to those who do not have my own tastes ... and sorry but this is not bad.
Does crossfeed work? And how! And it's great! To activate it, just a few click of remote control, but the little effort is rewarded with great joy: because the recordings affected by excess separation become immediately more enjoyable. I was pretty skeptical about that ... the crossfeed hurt whole bitch. If we add a bit of Talibanism to "recordings are like this and listen to each other" the perfect mix is ready. Sonically I have to say that if used “cum grano salis” is one of the most interesting functions of the Marley MKII ... also because, dear ones, speakers and headphones are two different worlds and as such must be treated.

TEST

Let's start with the given power, both said and done. OK the Marley MKII comes out a little more than 10V on unbalanced and 20V on balanced ... but the interesting side is also that abundant Ampere output ... 15W on unbalanced are you enough?
Well let's move on to the frequency response. In green the output at 47Ohm. In blue the one at 10 and in purple the one at 0.
Purism of linearity? Honestly I miss you know how the albums you listen to are recorded ... therefore I already tell you that that -0.1db in the last octave is completely irrelevant, but completely useful to give Marley a definitely M2Tech sonic imprint. In the low range as far as music is recorded you have -0.1db ... and this also serves M2Tech sound. The bottom remains ... well my dear, I know that there are those who tell you that analyzes the music with the spectrogram ... but underneath there is very little. First of all, there is little because below ... it is cut with a high slope filter, secondly the microphones are not samples of the low range and they also do more work than the applied threads.
The rest are just measures to be left open-mouthed.

CONCLUSIONS

There is only one thing left to say: the cost. Well the Marley in the price list is 2134 €. Although they are a fair amount ... from his has an extreme longevity and the fact that sonically pulverizes

various headphones amps over 10k.

PS

We have not tried it with the Van Der Graaf MKII, but I believe that a better power supply can help it further ... ok so it costs more, but being a separate product, the costs can very well be deferred.