



Quadratic Audio

MC-1 升壓牛

超出預期的效能提升

文 | Keith

This time I tested a Quadratic Audio MC-1 Moving Coil Transformer. To be honest, this is my first time to approach this brand of products, but I have also heard the name of Jam Somasundram, the designer of this Transformer. He is the past engineering director of Cary Audio. After joining Pass Labs in 2013, Jam Somasundram spent a year conceiving the HPA-1 A headphone amplifier, which relied on a custom toroidal power transformer with a Faraday cage to reduce the low sound of the signal amplification. After being launched on the market the following year, it was widely praised by audiophile and won numerous awards.

Two sets of gain settings

CineMag has been established in North Hollywood, California, USA since 1979. Its early products included Cinema Magnetics. Hence their names, Cinema and Magnetics are combined into CineMag, which has always been a transformer manufacturer for professional recording equipment. Quadratic Audio collaborated with CineMag to produce a unique transformer that incorporates a number of proprietary technologies. The design uses Faraday cage to help reduce noise and a unique semiconductor device fabrication. The design has extremely high frequency interference and hum elimination. The bandwidth is wide, the sound-surround ambiance is rich and the music is detailed. The two transformers are mounted on custom printed circuit boards and each channel has its own ground plane to minimize interference between the two channels. The factory gain setting of the MC-1 Moving Coil Transformer is 28dB. Users can choose a lower setting of 22dB by simply adjusting it through the wire jumpers on the circuit board.

Faraday cage

The internal transformer of the C-1 Transformer has its own Faraday cage, which is a cage used to block electromagnetic fields (so it is also called a Faraday cage). The reason why the Faraday cage operates is because the external electromagnetic field causes the conductive material of the cage to The charge distribution within the cage thus offsets the field effect inside the cage. This phenomenon is commonly used to protect sensitive electronic equipment, such as RF receivers, from external radio frequency interference (RFI) during testing or calibration of precision equipment. Even if a large current passes through the cage, the current passing through the objects inside is very small. When facing electromagnetic waves, it can effectively prevent a large amount of Electromagnetic Interference (the official parameter is greater than -30dB isolation) to achieve the best noise suppression effect. In addition, there is also a GROUND LIFT setting on the circuit board (also adjusted through jumpers), allowing users to float the ground to eliminate acoustic interference generated in the ground loop. The subsequent amplification provides a clean signal.



規格：

Specification

·Gain setting: +28dB (high)/+22dB (low). Frequency response 10Hz - 100kHz - Dimensions (W x H x D): 165 x 76 x 203(mm)
- Weight 1.9kg - Price HK\$16,400

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Formal test

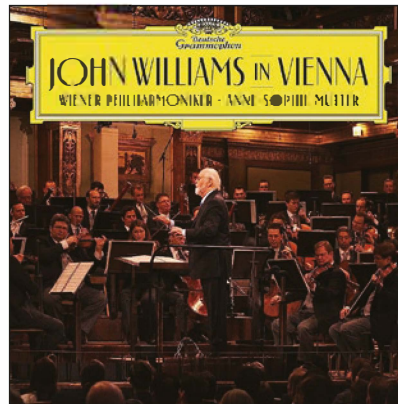
First of all, I listened to a record called "Danny Summer In Concert" that I often listen to recently. Therefore, the record covers a wide range of genres, and the recording and post-production are very good. When listening to "Who Is My Favorite" and "Empty Stool", Danny's vicissitudes of voice are more infectious. In contrast, after adding the MC-1 Transformer, the violinist's bowing is clearer and the lingering sound of the string is more clear. The overall regularity and enclosure feeling of the music have been significantly improved, which makes me feel more engaged in listening to the music. The song "If" performed with Bao Yizheng made me feel a stronger sense of presence than without the MC-1 Transformer.



Listen to 2V1G's "Choice" again. In my humble opinion, it is easier to test whether the equipment has more timbre orientation when listening to this kind of simpler music. As a result, I listened to the first song by guitarist Roger Wang. "The Forgotten Time" performed in fingerstyle style feels new and natural. The difference between the texture and fullness when it is not paired with the MC-1 transformer is more obvious. For example, the weak tone when plucking the bass strings with your fingers is more obvious. Three-dimensional, the aftertaste of the string sound is long and more solid. As for vocals, the MC-1 transformer makes the singing voice more rounded without losing analytical power. The singer's mouth shape and sibilance are clearly audible. It feels like the MC-1 transformer does not place too much emphasis on the mid-range, or directly speaking, it is not too oriented with its own taste.



If I want to feel the dynamics of the MC-1 transformer, of course I have to try a relatively large movement. I chose "Imperial March" from "John Williams in Vienna" and played a familiar main melody in the introduction, with trombone and trumpet. The horn has a strong texture, with both atmosphere and momentum. The overtones of the flute and French horn in the middle section extend very smoothly and naturally. The sound of the celesta in the middle is transparent and has a strong sense of positioning. Another song, "Raider's March", performed by German violinist Anne Sophie Mutter, was not only majestic, but also had an excellent sense of stage and three-dimensionality. After pressing the MC-1 transformer, the overall low frequency is more layered and the bass lines are more distinct!



Listen to "Audiophile Jazz Prologue Part 1", which has a feeling of enjoying life. The first song "Autumn Leaves" is sung in French. The ups and downs of the song express emotions, and the texture is gentle and delicate. Listening to the saxophone solo in the middle of "Round Midnight" is particularly important. The quiet background of the sound makes the intensity of the blowing and the expression of the details of the blowing clearly audible. The strong metallic feel and elegant treble are paired with the deep and broad sound. The sound field carries a very strong jazz music atmosphere, and the strong sense of presence makes the author very intoxicated.



Summary

I was very surprised when I tested Quadratic Audio's MC-1 transformer this time. In addition to providing a powerful gain, it is also quite good at noise control, making the music fuller and denser. Although Quadratic Audio is currently a relatively new brand, if you consider the improvement in sound quality performance, it is really a good deal for more than ten thousand.

