Robert Kõda

TAKUMI MC-ONE PHONO EQUALIZER



In the mid 20000's we set out to meet the challenge of creating a truly great phono pre-amplifier. During the following years we introduced the highly acclaimed K-10 and K-15 EX pre-amplifiers but no phono options despite our continued and best efforts.

It was not until 2014 when we invented a new and superior technique to apply the RIAA equalization curve that the project started to take final shape. A further two years of hard work were still needed to attain our goal.

The final outcome is one that not only achieves an excellent measured performance with unique merits, but most importantly, a sound quality that places analogue as a firm and clear choice for music lovers. We are now ready to present the Takimi MC-One.



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Equalization – A genuine new approach with real benefits.

Our unique equalization circuit brings about new performance levels that otherwise might be impossible to achieve. The concept has never been applied to any other phono stage before and we are delighted to present it in the MC-One.

Going much deeper than the question of carefully matching component values to achieve good RIAA accuracy (which we do to a fanatical extent anyway), our novel filter actually "lifts" the difficult load off the working transistors. This results in greater fluency of sound, wider headroom and extended resolution.

High Gain. Massive Headroom. Generous Output and Low Noise.

For very low output moving coil cartridges, up to 72dB of gain available.

Even at the highest gain setting random noise is well below that of an unmodulated record groove. Overload margin is impressive with a maximum output of 20V RMS (56V peek to peek), extending far into into the ultrasonic range. This superb combination of low noise, high gain and massive overload margin is a very rare achievement indeed and testament to the designs dexterity.



Dedicated Moving Coil Only Design.

Traditionally phono pre-amplifiers are built around a moving magnet design with an additional moving coil "head amp" or step-up transformer "tacked" on for MC use. We have chosen to instead design a dedicated moving coil unit from the ground up. By using enlightened techniques with an extra high 160 volt power supply we eliminated the need for either a MC step up transformer or a "head amp".

Useful switches and connectors.

For mono records, or those best heard in mono, the mono mode may be engaged. For power up / down, stylus cleaning etc, a mute switch is provided. Gain may be adjusted in three steps with a rear control while a second rear control offers fuss free six position cartridge loading. Additional loading options are possible.

All selectors are rotary switches, purpose built for micro audio levels and of the highest quality.

Inexpensive DIP switches relays or digital control are entirely eschewed in this critical landscape.



Permalloy - Fully annealed

Critical components are each housed in their own Permalloy enclosures – Five in total. The magnetic performance of the Permalloy is enhanced by fully annealing after manufacture at a temperature of 1100 degrees Celsius for two hours in a hydrogen atmosphere.

The encased parts are then potted in a speciality compound to damp any mechanical vibrations.

The power switch and custom R-Core transformer too are housed in a "magnetic vault" built to the same specification such that power supply may be included into the main chassis with no adverse effect.

Beautiful Build - A copper envelope.

A double chassis construction is used to provide immunity from radio frequency pick-up. In addition, the copper inner chassis provides excellent mechanical damping with enhanced thermal control while the aluminium outer contributes to the gorgeous and classic lines of the Takumi MC-One. Final gold trimmings and a solid ruby lens for the power illumination complete the timeless presentation.



Single Ended and (thus) full Class A.

Whilst "full balanced" is popular with main-steam high end designs, Robert Koda has chosen to build a pure single ended model. By taking this approach, the number of consecutive transistor junctions is literally halved – The signal "path" is halved. Building a phono stage pure single ended requires some very exotic design approaches in order to enhance, rather than compromise performance. The power supplies purity too becomes of great importance.

Accepting these difficult challenges, we developed a "better than battery" high voltage power supply. Then we included special circuit elements that dramatically lessen the effect of power supply finite impedance. The result is an important gain in transparency and purity. A freedom from "power supply" sound.

ITC for final gain and buffering.

Since the final output is delivered thru our propriety ITC circuit – The same one as used by K-15 EX, both balanced and single ended outputs of equal electrical characteristic are available with no "conversions" needed. Choose at will what suits your pre-amplifier best. The drive from ITC is powerful, layered and full of musics subtleties and colours.



Component Quality - The Highest Grade.

Each and every component within Takumi MC-One is carefully considered and selected to be of the greatest suitability for the task at hand. Critical components are hand matched to meet target response precisely. Over-sizing further contributes to best reliability and sound quality. Many of the parts included are manufactured exclusively for the most discerning music listeners while other parts are unique to Robert Koda built for our exacting purposes. Even the effects of solder have been examined, resulting in the use of multiple solder formulations depending on the location of use. Signal wiring comprises of our custom "four nines" pure silver litz while connectors are WBTs finest silver models.

Double Binding Posts.

Two high grade binding posts are provided for added flexibility and to achieve lowest possible system noise.

One connects to the signal zero volt reference while the other to the chassis ground.

Connections to additional grounding devises becomes simple and reliable procedure.

A Mission success

Ultimately each MC-One takes weeks to produce and is lavished with costly materials. Superlative technical design, dedicated care and a true artisan manufacture its foundation. Music on vinyl is "revealed" as never before. An excellent measured performance coexists with a lasting sound quality that places analogue as a firm and clear choice for music lovers.



Preliminary Specifications

Inputs One stereo pair. Single ended with RCA and XLR connectivity.

Outputs One set RCA plus one set XLR. Balanced or SE selectable.

Output impedance 60 ohms SE or 2X30 ohms balanced.

Equalisation RIAA by propriety techniques.

Gain Selectable with out opening the unit. 56, 64, 72dB.

Maximum Output 20V RMS any audio or ultrasonic frequency, any gain setting.

Noise -78dB (A) weight at 72dB gain. Ref 500mV

Loading 20 ohm thru 1K in six positions. Custom values possible with out modification.

Other controls Mute, Mono / Stereo, power.

Dimensions 389mm Wide, 385mm Deep, 158mm High excluding feet.

Packing Flight case delivered in high strength cardboard.

AC operation 210 thru 256V or 105 thru 128V.

Range manually selected.

Specifications subject to change without notice.



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