

< History of Phono amplifier in Phasemation >

Chapter 1: Phasemation’s first phono amplifier was the EA-1, introduced under the PhaseTech brand.

The history of Phasemation began more than 20 years ago, in 2002, with the release of the P-1 MC cartridge under the Phase Tech brand. Even at that time, our engineers recognized the necessity of a phono amplifier capable of bringing out the best performance from the cartridge. At that time, there were already many renowned and popular cartridges and amplifiers on the market. However, Phasemation aimed to develop products that would satisfy our own uncompromising standards beyond those of other manufacturers. The first step toward that goal was the EA-1 vacuum tube phono amplifier, introduced in 2003. Following the release of the EA-1, we introduced a series of new products that MC cartridges, Head-shells, and MC step-up transformers.



EA-3 Y2006

In 2006, we unveiled the EA-3, a semiconductor-type phono amplifier. Since then, we have continued to develop various models based on the EA-1 and EA-3, incorporating numerous refinements and improvements over time.

Chapter 2: “EA-1000” Recognized Around the World

In 2010, the brand name “PhaseTech” was officially changed to “Phasemation.” Then, in 2012, a phono amplifier that astonished the world made its debut: the EA-1000. Since the release of the first phono amplifier, Phasemation had consistently adhered to the vacuum tube design and transformer input, and in the circuits, Phasemation employed a CR-type configuration without NFB (negative feedback). With the EA-1000, however, Phasemation took a completely new approach to achieve even higher sound quality. At the time, it was extremely rare worldwide to implement a monaural phono amplifier section and a separate power supply in a three-box configuration, as Phasemation did.



EA-1000 Y2012

Chapter 3: The Peerless High-End Model “EA-2000”

Following the announcement of the EA-1000, Phasemation introduced the PS-1000 additional power supply in 2014 and expanded the lineup not only with the top model but also with entry-level models, including the EA-200 and EA-300, and continued with the EA-500, a solid-state amplifier that, like high-end models, featured a transformer input.

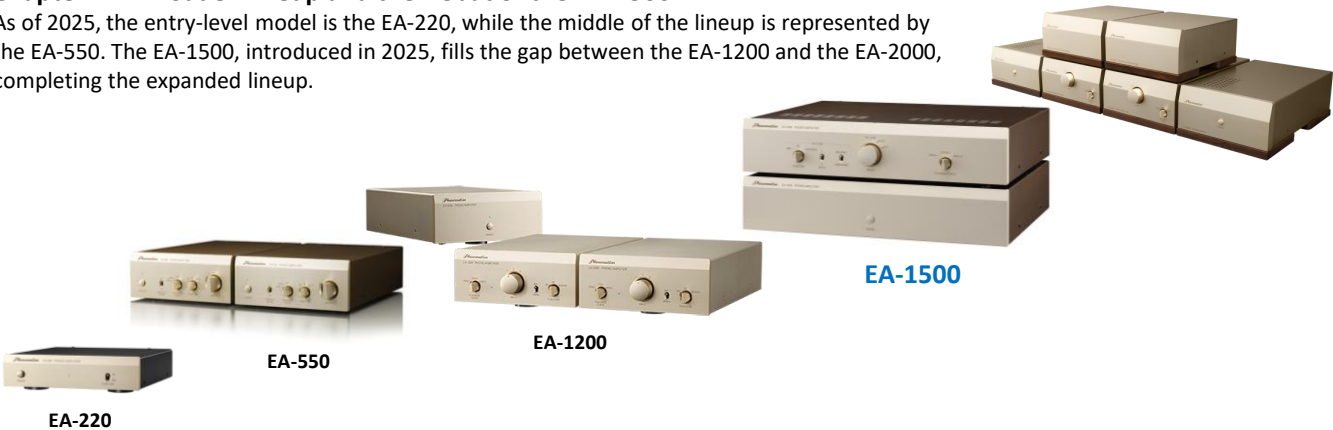


EA-2000 Y2020

Then, in 2020, Phasemation launched the unprecedented six-chassis phono amplifier, the EA-2000, representing the ultimate evolution beyond the EA-1000. To further enhance the EA-1000, the EA-2000 featured a monaural, fully separated MC step-up transformer. But that was not all. Aiming for even greater heights, we evolved the amplifier design from the CR type to the more challenging LCR type, and incorporated all the experience and expertise that Phasemation had cultivated over the years. The result was the EA-2000—a culmination of our relentless pursuit of ultimate sound quality.

Chapter 4: A Broader Lineup and the Debut of the EA-1500

As of 2025, the entry-level model is the EA-220, while the middle of the lineup is represented by the EA-550. The EA-1500, introduced in 2025, fills the gap between the EA-1200 and the EA-2000, completing the expanded lineup.



EA-2000

EA-1500

EA-550

EA-1200

EA-220

< Concept and Intent >

Phasemation's technology embodies several particular philosophies, such as the use of vacuum tube devices and non-feedback circuit designs. Among these, one method especially inherited by our reference-class models is the adoption of a monaural configuration wherever possible, or the separation of each circuit according to its specific function. From an audio perspective, this approach is ideal, as it eliminates mutual interference and allows each function to perform optimally. However, this separation also comes with disadvantages in terms of space efficiency and inevitably impacts the final product cost.



The EA-1500 was designed to inherit the quality and essence of Phasemation's reference model, the EA-2000, while adopting a stylish two-chassis configuration. This allows for an efficient use of space and makes it possible to offer a state-of-the-art phono amplifier at a more accessible price. The EA-1500 is engineered not only to bring out the full potential of Phasemation cartridges but also to unlock the performance of the world's many outstanding cartridges. Enjoy your ultimate listening experience with the EA-1500.

< Carrying Forward the Technology Developed with the EA-2000 >

The EA-1500 incorporates a wealth of Phasemation's accumulated know-how. In particular, many of the technologies developed with the EA-2000 have been carried forward, and their impact is clearly reflected in the final sound.

■ LCR-type Phono circuit

Conventional NF-type phono amplifiers, which use negative feedback circuits, have the advantage of being less prone to noise and easier to control in terms of characteristics. However, because the musical signal is not transmitted directly in a single pass, they cannot match the freshness of a CR-type design. The CR type is known for bringing out the full potential of high-quality components and superior sound, and while some other manufacturers have adopted it in limited cases, most amplifiers remain NF type. Phasemation has employed the CR type since its very first model. With the EA-2000, aiming for an even higher level, we successfully implemented the LCR type—a design considered difficult for consumer equipment. While the impedance in an NF-type circuit can reach several hundred kilo-ohms, a CR type can reduce it to around 30 kΩ, and replacing it with the LCR type allowed us to lower it further to approximately 1 kΩ. This reduced load minimizes power loss and enables a more vibrant, lifelike sound. The EA-1500 also adopts this circuit, inheriting the high-fidelity performance of the EA-2000.

■ Floating Power Transformer

The power transformer is constantly vibrating, and these vibrations can be transmitted to the circuit board, components, and wiring, causing a blurring of the sound. Thorough vibration control is therefore essential. In the EA-1500, just like in the EA-2000, damping rubber is installed beneath the transformer to rigorously prevent unwanted vibrations from reaching the circuit board.

■ A shield case that protects the transformer from unwanted noise.

The internal transformers are protected from external influences by the top cover; however, achieving complete isolation had been a challenge since before the design of the EA-2000. To further minimize external interference, the method developed for the EA-2000—mounting shielded cases on the internal transformers—has also been carried over to the EA-1500.

■ Securing Space Around the Step-Up Transformer

To achieve an unrepressed, open sound, the step-up transformer should not be installed in a cramped space. This was proof that "it is best for the step-up transformer to be in a separate housing," as was practiced with the EA-2000. The step-up transformer in the EA-1500 is housed in the same housing as the phono amplifier, but by taking the surrounding space into consideration as much as possible in the layout, it can be said that the sound has come closer to that of the EA-2000.



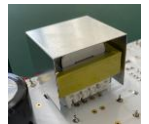
< New technology exclusive to the EA-1500 >

■ **Realized the best performance of any cartridge, including optical cartridges.**

Phasemation phono amplifiers are naturally designed to work well with Phasemation's cartridges, but are also good matching with any cartridge available. The EA-1500 is Phasemation's first phono amplifier to support optical cartridges. Optical cartridges convert the changes in the sound groove picked up by the stylus tip from light into an electrical signal, and this LED is powered by a portion of the cartridge's wiring, drawing power from the phono amplifier. While the power supply is also provided via a portion of the cartridge wiring, the EA-1500 minimizes the power's impact on the phono amplifier by supplying power to the optical cartridge from a dedicated transformer housed in a separate power supply unit. The EA-1500 also features a NEUTRIK XLR terminal for optical cartridge input, but this is not a separate power supply; it allows the unbalanced output of the optical cartridge to be connected using a conventional balanced MC analog cable. Enjoy the lush sound of optical cartridges with Phasemation sound.

■ **Internal step-up transformer with brush-upped windings**

The step-up transformer is based on the EA-1200, with the windings and other components redesigned for the EA-1500. Phasemation specializes in transformers, but they perfected it through repeated trial and error, taking into account playback of a variety of cartridges. The transformer, wound by hand by Phasemation's technicians, is a crucial component in today's phono amplifiers, delivering a cutting-edge soundstage. Naturally, the windings use the acclaimed PC-Triple C.

■ **Separate power supplies for L/R channels, even in a single enclosure.**

The EA-1500's power supply is housed in the same full-size single box as the phono amplifier section, but the power supply itself features two independent transformers for left and right channels, providing a nearly dedicated power supply for each channel. By using a 5U4GB vacuum tube in the rectification circuit, the clean power supply eliminates the switching noise inherent in semiconductor systems, contributing to high sound quality.



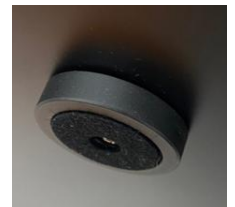
< Other specially designed technologies for emphasizing sound quality >

■ **High-Speed Phono Amplifier with Wide Dynamic Range**

Vacuum tubes, which can operate at higher voltages than semiconductors, offer the advantage of a wide dynamic range. Furthermore, Phasemation's commitment to non-NFB (non-negative feedback) technology allows for a high-speed, modern amplifier. This high speed and wide dynamic range deliver a truly immersive playback experience, as if the performers were right in front of you.

■ **Hybrid Insulators Finished Through Repeated Listening Tests**

Even after the electrical circuitry is complete, the surrounding mechanical components and their structure require even more careful consideration. For example, the legs must not pick up unwanted vibrations and are crucial components that transmit the device's performance to subsequent equipment without impairing it. When considering the weight, shape, and type of material, the "recipes" are virtually endless. The insulators used in the EA-1500 were crafted by Phasemation's designers through repeated listening tests, selecting a combination of different materials that would best reproduce the soundstage.

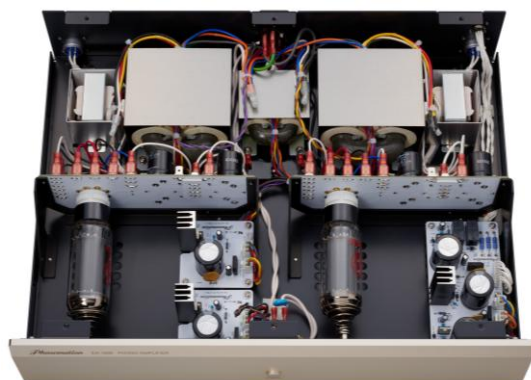
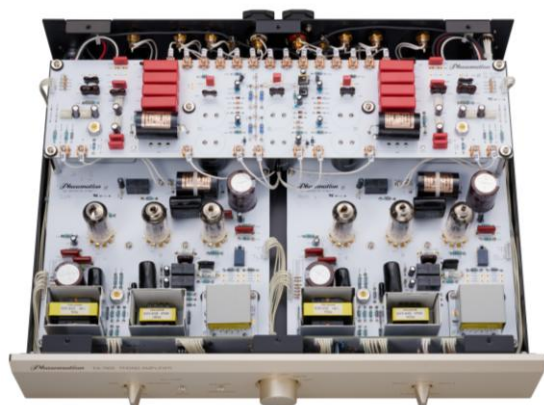
■ **Original Top Cover Thoroughly Eliminates Externally Induced Hum-noise**

A product's top cover is necessary not only to prevent electric shock but also to protect the internal components from dust. However, its most important role in high-end audio is to prevent interference from induced hum and other noise from the surrounding environment. With the proliferation of signals from various peripheral devices these days that can cause unwanted hum and noise, simply attaching a steel cover is no longer sufficient. The top cover used on the EA-1500 is made of copper-plated steel and further coated with a low-dielectric coating, thoroughly eliminating external interference. Furthermore, the use of a thick 1.6mm steel plate ensures a structure that is resistant to external vibrations.



<Two Mono Modes and a Convenient Demagnetization Function>

Before the release of today's standard stereo records, many famous performances were primarily mono records. At the time, there were no globally standardized equalizer curves like the current RIAA standard, and record companies recorded using their own methods. Furthermore, phono amplifier curves varied widely across companies. As a result, amplifiers used to play mono records varied widely, making it difficult to fully utilize the full potential of the records. Among these, Decca in Europe and Columbia in the United States are representative of these curves. The EA-1500 supports these two typical characteristics, allowing you to fully enjoy the records of that era. Furthermore, since a magnetized cartridge bobbin can impair performance, the EA-1500 also features a built-in demagnetization function.



<Specifications>

- Input Sensitivity: 2mV (MM), 0.1mV (MC)
- Adapted Cartridge Impedance: > 47kΩ (MM), 1.5~40Ω(MC)
- Gain: 40dB(MM), 66dB (MC)
- Input Equivalent S/N Ration: -120dBV (MM) , -146dBV (MC)
- RIAA-equalisation curve accuracy: $\pm 0.5\text{dB}$ (20~20kHz)
- Rated Output: 200mV (1kHz)
- Power Consumption: 70W (100VAC 50/60Hz)
- Input Terminals: MC/MM(RCA x2, XLR x 2, OPT (RCAx1, XLR x 1(Unbalanced))
- Output Terminals: RCA x 1, XLR x 1
- Dimension / Weight: Amplifier 430 (W) x 93 (H) x 359 (D) mm, 9kg
Power Supply 430 (W) x 93 (H) x 346 (D) mm, 12kg

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This document is for reference only. Please note that function, specifications, and external design may be subject to change

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