Allnic HPA-3000GT

Hen | Approval 2016.03.02 00:00 | March 2016 (524) | Comments 0

When the tube headphone amplifier meets the preout

I seized it. Tube headphone amplifier is pre-output? It also combines the performance of Allnic's preamplifier, which has already been praised by American audio journal Stereopile, for a three-pole headphone amplifier?
I'm talking about the Olnick HPA-3000GT. In my urgent mind, I tried to count the number of cases before starting to listen to the most 'personal' calculations. 1. Simply put this HPA-3000GT in front of your favorite transistor power amplifier and you can get a taste of Olnick's preamp. 2. You can enjoy the world of sound created by the triode, nickel

Latest news

- Gryphon etos
- Dynaudio Confidence 60
- Kuzma Stabi R
- Vimberg tonda d
- Simaudio MOON 390330A

Photo news

Gryphon etos

Popular news

1 Eggleston Works The Viginti

2 Bose Noise Canceling Headphones 700

3 Living Voice IBX-RW3

4 Kanto Audio YU6

transformer and 41-attenuator by biting your current headphones. 3. It also comes with balanced outputs. Balanced headphones, which are popular these days, are no longer the case.

First, I looked at the appearance. Olnick's proud 41-speed attenuator is the most eye-catching. It is a classic design. The vacuum tube used composite triode 6EM7 once per channel. Olnick's trademark polycarbonate chimney is still there. Unlike the HPA-3000MT version, however, the constant voltage tube was missing and a choke transformer was used instead. The output transformer is Olnick's other pride, the nickel permalloy core. The front has two terminals for headphones below 50Ω and above 200Ω. 6.5mm terminal and balanced output terminal respectively. The rear has a balanced input, an unbalanced input and a free out.

Design I'll do a design analysis later, and I've first handed over the power amplifier. Personally, I was curious about the performance of the preout, and I really wanted to hear it. In the listening room, Olnick's power amplifier A-2000 (25th anniversary version). It's a terrible power amplifier that pushes the KT150 twice per channel to pull out a 100W output. The source was a Marantz CD player CD94, unbalanced with the HPA-3000GT. The speaker is Rogers LS3 / 5a. I listened to a few songs without any prejudice.

Carol Kid's 'When I Dream' sounds pronounced again and again. Clear The guitar is clear and has a pulpit. The overtones and reverberations unique to the tube are good. The impression is that the power amplifier is easily driven. At the 3rd movement of Beethoven's Piano Sonata No. 15, played by Emil Gilrells, the piano's time is clear. Excellent balance and speed between bands. Well there is no blemish anywhere. Ricardo Shay, Royal Concerto Orchestra's Mahler Symphony No. 5, 1st movement, stands out above all. There is nothing to crush in notes. When it's clear, when it's time to relax, when it's time to push on, it recognizes all of these things. The sound stage is also vast.

Now, I also checked the performance of the headphone amplifier, which is called 'natural mission'. Headphones are Sennheiser HD800. Since it is a 300Ω headphone, it is bitten by the headphone jack of the HPA-3000GT 'more than 200Ω'. At this time, the power amplifier A-2000 was connected with an unbalanced cable, but the power amplifier was turned off. This is because the HPA-3000GT has both headphone output and preout.

Mahler No. 5 is incredibly quiet, which is quite different from what was heard before. I didn't know that the world of HD800 would be this much with the overwhelming S / N ratio. The presence of the diaphragm itself disappeared. The harmonics and reverberations coming in through the triode and nickel trans are amazing. Even though the attenuator volume is 10 o'clock, the blow is not a joke. The holographic image comes to mind as it penetrates the

5 Diapason Karis III

6 Klitz Brothers & Cuba Percussion-Beethoven Meets Cuba

7 Torus Power AVR 16 CE

8 Audio Physic Virgo III New

head back and forth. In the Emile Gilles performance, the world of delicate reproduction sounds unique to high-impedance headphones is unfolded. There is an urge to keep the volume up. It is said to be the king of the end of Jeongsook and speed. In Carol Kid's song, she's even felt. She sticks to my ear and whisper. It's a concert just for me.
How did Olnick's HPA-3000GT catch the preamp, headphone amp and two rabbits? Design
In terms of design, I carefully examined and inferred.
First of all, thanks to the excellent physical properties of the triode 6EM7 operating in Class A. This tube is a compound triode containing two units each for voltage amplification (super short tube) and power amplification (output tube). The advantage of shortening the signal amplification path is that the vacuum tubes for voltage and power amplification are entrusted. That means less distortion of sound. In addition, the internal resistance of the unit acting as an output tube is about 750Ω, which is the same as 300B, allowing for powerful low pass reproduction and flat frequency response. If the tube's internal resistance is high, most of the low end will escape.

Next comes the impedance matching optimized for the headphones. As mentioned earlier, the HPA-3000GT offers two options for headphone impedance matching. One is less than 50Ω and the other is more than 200Ω. This is possible because the headphone amplifier is transformer coupled. The different windings are pulled from the output transformer and 'connected' to the low and high impedance headphones respectively. When impedance matching is completed, the negative energy rises above all. Furthermore, Olnick's output transformers, as is well known, use Permalloy (an alloy of nickel and iron) with a very high Initial Magnetic Permeability, which determines the speed and damping force of the reproduction sound.
This sounds obvious, but I think you've seen a lot of the good things happen in the amp. Olnick's power transformers have a voltage fluctuation rate of only 3-4%. That is, the fluctuation rate of the voltage (B voltage) applied to the tube plate with and without the music signal is so low. Accurate reproduction is not possible from the beginning because the B voltage fluctuates greatly according to the music signal. In addition, the HPA-3000GT puts one choke transformer per channel in order to eliminate ripple.
The superior performance of these headphone amplifiers leads directly to preamplifiers. In fact, headphone amplifiers and preamps have a lot in common, such as 'volume matters' and 'output impedance needs to be low'. This is why Olnick put a pre-out on the HPA-3000 GT headphone amplifier, unlike the HPA-3000MT, OTL or OCL-based HPA-5000.
First, both should have good S / N ratios. Extremely low noise This is because the headphone amplifier is directly heard, and the preamplifier is in front of the power amplifier. And both must have low output impedance. Of course, this is also due to impedance matching, which is summed up as 'low and high'. That way, energy can be delivered to the rear without loss, and cables can be burned less. The HPA-3000GT has only 35Ω of this preout output impedance, which is almost the same as a high-end transistor preamp. In addition, the pre-out output voltage reaches up to 10V, which is enough to drive power amplifiers that eat a lot of preamps.

Olnick's 41-stage attenuator Ver.2 was dedicated to the volume stage, which becomes more important for high-end preamps. Olnick's own attenuator is famous for dramatically reducing the distortion of sound by reducing the volume contact from two to one. Of course, this differs from the carbon resistive volume. The 41-speed attenuator is included in Olnick's top-of-the-line preamps and integrated amps.
The HPA-3000GT, in short, is Olnick's conversion that satisfies both high-end headphone users and audiophiles who want to adopt a high-end preamp. Personally, worries seem to be born. What about the water bath that comes like this tide?

Distributor Audiomentos (031)716-3311 **Price** 3.8 million yen **Vacuum tube** 6EM7 × 2
Analog input RCA × 1, XLR × 1
Headphone output XLR (4-pin) × 2, 6.5 mm × 2 **Preout Frequency response** 20 Hz-20 kHz (± 0.3 dB)
Voltage gain + 28dB **S / N ratio** -68dB **THD** 0.03% or less **Size (WHD)** 24 × 17.5 × 33cm
Weight 10kg

Tag #Allnic HPA-3000GT #OLNIC #Vacuum Tube Headphone Amplifier #Headphone Amplifier

Copyright © Monthly Unauthorized Reproduction and Redistribution of Monthly Audio

View other
Kimpyeon
articles

Monthly Audio (March 2016-524)

당신에게 추천하는 콘텐츠

by

AD
얼굴주름, 모공 "이것" 발라 팽팽해져!

Dynaudio Confidence 60

HiFi ROSE RS201A

Cary Audio SLI-100

AD
"체내비만균 발견" 자면서 체지방 쫙- 빠져..화제

Unison Research Sinfonia

The news you didn't see

EgglestonWorks The Viginti

Bose Noise Canceling Headphones 700

Living Voice IBX-RW3

Kanto Audio YU6

Diapason Karis III

Klatz Brothers & Cuba Percussion-Beethoven Meets Cuba

Torus Power AVR 16 CE

Comments 0

Enter comment

AUDIO

Corporate name: Audio Co., Ltd. A21, Main Square, 74, Cheongpa-ro, Yongsan-gu, Seoul, Korea
Main Phone: (02) 712-6633 Fax: (02) 712-0660 Email: audioht@hitel.net
No.: Monthly Audio Registration Number: Yongsan La 00084 Issue Date: 1st of every month Registered Date: 2009-04-15 Publisher: Editor's Name
Youth Protection Officer

Monthly Audio All content (articles) is protected by copyright law and is prohibited from unauthorized reproduction, copying, and distribution.
Monthly audio complies with the Code of Ethics and the Code of Practice. © **Monthly Audio** . All rights reserved.

POWERED BY NC