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Test

INTEGRATED AMPLIFIER

Allnic Audio T-2000 30th ANNIVERSARY

Manufacturer: ALLNIC AUDIO

MADE IN SOUTH KOREA

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[ALLNIC AUDIO is a company from South Korea, founded by KANG SU PARKA, which has been specializing in the production of tube devices for over 30 years. Its offer includes amplifiers, preamplifiers, phono cartridges and cables. We are testing a special, new version of the already known T-2000 model, the 30th Anniversary, using a hot (literally and figuratively) novelty, the KT170 lamp.]

IE THIS IS THE FIRST AMPLIFIER, the output stage of which is based on the KT170 tube . Our native Audio Reveal Second Signature was faster (testHERE). This lamp hit the market relatively recently, but because perhaps not everyone read that text, it is worth recalling a few basic information.

| KT = KINKLESS TETRODE

THE FIRST LAMP FROM THE FAMILY OF KT beam tetrodes, which achieved considerable market success, was the KT66 launched by the British company Marconi-Osram Valve in 1937 . These tubes were used from the very beginning in radios and amplifiers, including guitar amplifiers, in a word they were already associated with the audio industry, which is worth emphasizing, because many tubes, today even the so-called "Iconic", it was designed for other applications. In 1956, the GEC company presented a larger version of the KT66, still probably the most used and best-known version today, namely the KT88. After a longer break, in the 90s of the twentieth century, the KT90 model hit the market thanks to the Ei brand, and the KT120 appeared even later.

The 21st century saw two more prime ministers of this family, both thanks to Tung-Sol. First, in 2013 it was KT150, and finally in 2020 KT170 - the largest and most powerful representative of the beam tetrodes from the KT family. The new tube means, above all, new possibilities for designers, allowing them to design even more powerful amplifiers.

ONE OF THE FIRST DESIGNERS who used the KT170 tube in their amplifier was the already mentioned MICHAŁ POSIEWKA from Audio Reveal. This is a specific case, as the newest representative of the KT family worked in its design in a single-ended circuit.

Others, and the proposals based on this tube can also be found in the offer of the French Jadis (model I-70), and now also Allnic Audio, have gone in the direction to which these tube models are primarily intended, ie "squeezing "high power from them , and thus creating amplifiers that are a real alternative to transistors (of course they talk about their ability to drive even more difficult loudspeakers). So in the direction of push-pull amplifiers.

ALLNIC AUDIO

LET'S START WITH A SHORT INFORMATION ABOUT THE COMPANY. Allnic Audio has been in existence for over three decades, but telling a story about the history of the brand, its creator goes back almost to the beginning of the 20th century. In 1916, one of Western Electric's engineers developed an alloy of iron and nickel, known today as Permalloy. It quickly found application in the audio industry, and today it is still eagerly used, among others in recognized as one of the best amorphous transformers. It was this material and its use in all signal transformers that contributed to the brand name: Allnic Audio - All Nic kel Core Transformers, which indicates that the cores of all transformers used by this manufacturer contain nickel.

Among the important elements of his company's philosophy, Mr. Kang Su Park points to the use of coupling transformers instead of capacitors in the gain stages . As he writes on his website, the production of transformers with Permalloy is expensive and difficult, but the results obtained by them are worthwhile. The thing is, as we read, that such transformers can transfer even more than 90% of the signal, while the efficiency of the capacitors is about 5%.

The manufacturer also emphasizes that the use of preamplifiers with transformers at the output in conjunction with transistor amplifiers additionally protects the latter against potential threats , because the transformers block overvoltages that, when they reach the next stage (amplifier), can lead to its damage.

In fact, the history of the Korean brand began with the launch of a stereo amplifier using two 300B triodes per channel . In the following years, other devices were added to the offer - amplifiers: stereo and monoblocks, but still with 300B triodes in the output stages, as well as preamplifiers. It was only in 2008 that the first Allnic Audio phono preamplifier, the H-1500 model, hit the market, and in 2011 the first amplifier based on a tube other than the 300B, namely the KT120. In 2014, the Korean manufacturer introduced another phono preamplifier - the H-5000 DHT (DHT stands for Direct Heated Triode), which I hosted in my system for several weeks and which left a great impression.

In 2020, the company presented two new turntable cartridges with a moving coil, the Rose and Amber models, and this year the market hit, among others, the newest H-5500 phono preamplifier that opens the offer. It was Amber and H-5500 that were the first two Allnic Audio products that I had the opportunity to test, and you will find their tests on my websiteHIFIKNIGHTS.com. Each of them, as well as both together, confirmed what I remembered from the listening session a few years ago, and made me look forward to the next opportunity to listen to the products of this brand.

T-2000 30th ANNIVERSARY

While constructing the amplifier on the KT170 tube, he did not change his philosophy. He created a single-ended amplifier, which by no means does not offer any particularly high power. Mr. Kang Su Park, who stands behind the Allnic Audio brand, on the one hand followed a similar path, using these tubes to create a new version of the existing amplifier - the predecessor is the T-2000 25th Anniversary, in which the Korean designer replaced the KT150 with the new KT170 (probably it was not the only change, but the most obvious).

On the other hand, the T-2000 30th Anniversary is a powerful, high-powered machine, working in a push-pull system, in which changing the tubes allowed to increase the maximum power from 100 to 120 watts in pentode mode and from 50 to 60 watts in triode mode. So we got a device with a greater ability to drive not only easy, but also more difficult speakers. This of course matters, as it increases the range of loudspeakers from which the buyer of this amplifier can choose.

In the T-2000 30th Anniversary output stage there are four KT170 tubes (two per channel). In the input stage, or as the manufacturer calls it: the first control stage, two 6J4 triodes were used, and four D3a pentodes (but operating in triode mode) were used as drivers (the second control stage). This is one of the highlighted features of this device: it has only two control stages , which, however, allow to obtain +40 dB of voltage gain.

The mentioned D3a are loaded with an impedance of 9 k Ω (most amplifiers with the more popular 12AU7 or 12BH7 lamps use a load of 47 k Ω) and work with a current of 12 mA. The circuit has been designed in such a way as to minimize the coloration of the sound . The soft-start system ensures the durability of the lamps. Interestingly, because the bias is set separately for each of the output tubes (KT170), the manufacturer does not require the use of paired fours. I did not have the opportunity to check in practice whether the differences could not be heard, but theoretically it means that when one lamp fails, it is enough to replace only the one.

The tested amplifier kept the characteristic design of Allnic Audio devices. The most characteristic element are individual transparent "tubes" - lamp covers, each of which is closed from the top with a perforated round metal element attached with two screws. After unpacking the amplifier from a solid, double cardboard, it is necessary to unscrew a dozen or so screws, remove the above-mentioned metal elements from the lamp covers, in order to remove the elements (cardboard) protecting the lamps mounted during transport.

In line with the brand's philosophy, the amplifier is available in two color versions - silver and black (graphite). Another element, characteristic of many Allnic Audio models, are metal handles attached to the top of the amplifier at the side edges, which make it easy to carry. And there is something to

wear in this case, as the T-2000 30th Anniversary, with dimensions of 440 x 480 x 300 mm, weighs a fair 36 kg.

On the one hand, the amplifier looks quite modest, for example compared to Kondo devices (eg ONGAKU, test HERE), on the other hand, however, you must know that it was made and finished flawlessly. In the center of the thick aluminum front there is a large volume control knob, and the amplifier is equipped with a remote control operated by a large metal remote control. The latter allows the amplifier to turn on and off, control the volume, mutate (mute) and select the active input.

Active input, and there are five of them - 3 x RCA and 2 x XLR - can be selected either directly from the numeric keypad or by using the arrows. After a few weeks of using this integrated, I must say that the only bothersome feature of the T-2000 is the fact that input 1 is active each time the device is turned on . So if you use a different one, you have to choose it each time.

| SILENCER

VOLUME CONTROL in the T-2000 30th Anniversary is done using the only, according to the manufacturer, 61-step constant impedance attenuator. As Allnic Audio assures, it is a unique solution that guarantees precise volume control and perfect balance between the channels at any volume level (I confirm!), And thus no negative impact on the sound quality .

KEYPADS ON THE FRONT WALL is complemented by a smaller knob that acts as an input selector and a small button that selects the operating mode of the output stage . The latter can work in triode mode, delivering 60 W into 8 Ω per channel, or in pentode mode, doubling the maximum output power (120 W for 8 Ω).

According to the manual, the modes can be switched "on-the-fly", that is while the amplifier is working , which makes the T-2000 30th Anniversary a unique proposition. Usually, changing the mode requires turning off the device, and thus each time a period of several or even several minutes, during which it must return to the optimal operating temperature. At first I was reluctant and at least stopped playing music while switching between modes, then I gave it up - after all, if the manufacturer's suggestion for switching on the fly is from the manufacturer, he should know what he is doing.

The main switch of the device is placed quite unusual on the right side (looking from the front). On the rear side, there are five line inputs, three with RCA sockets, two with XLR sockets, IEC power socket, and single loudspeaker sockets with a toggle switch (4/8 Ω) between them. The whole device is placed on four solid feet made of some kind of quite hard rubber. As I mentioned, at some point I placed the amplifier on three IC-35 Graphite Audio cones (cones made of a special polymer enriched with graphite) and it gave positive results, so it is worth considering investing in these or other anti-vibration elements .

On the upper surface of the amplifier, in addition to the already mentioned tubes in individual shields, there are two tilt indicators showing the backing current for the output tubes, and behind the tubes there are three black painted transformer boxes for the power supply (the largest in the center) and the output transformer boxes. The indications of the aforementioned indicators are the result of the analog bias measuring system working on an ongoing basis. Two small knobs also

located on the upper surface of the amplifier's housing allow you to make adjustments, if necessary (there was no such adjustment throughout the entire test period).

The output transformers not only use Permalloy cores (more precisely with a mixture of nickel and FeSi) with a large, 96 mm diameter, but also use a solution described by the manufacturer as "full engagement". Usually, tube amplifiers are equipped with output transformers with separate taps for different impedances (usually 4 and 8 Ω). When using one, the latter are disconnected, which reduces the efficiency of the transformers. Allnic Audio equips its transformers with four taps, but they all remain connected all the time, so the efficiency of the transformers does not decrease, regardless of which one we choose at the moment.

LISTENING

L HOW WE LISTENED During the test, the Allnic Audio T-2000 30th played mainly with the GrandiNote MACH4 speakers, but I also compared it with the Kharma Elegance S7 and Ubiq Audio Model One Duelund Edition. The amplifier was placed on the top shelf of the BASE VI rack, and additionally on the Acoustic Revive RST-36 quartz platform. During the test, I added one more antivibration element to the device, the IC-35 cones of the Polish brand Graphite Audio, which did such a good job that they remained in the system until the end of the test.

My J. Sikora Standard Max turntable with the KV12 tonearm and the Air Tight PC-3 cartridge worked as an analog source, and the analog circuit was complemented by the ESE Labs Nibiru phono stage. On the digital front, the main role was played by the reference LampizatOr Pacific digital-to-analog converter / file player (also set on the IC-35 set), "fed" from an audio server with either audio files or a digital signal , via LAN and USB cables, respectively (on change) by David Laboga.

AS IT OFTEN HAPPEN TO ME, I started the adventure with the tested amplifier not 100% in my own system, but finished listening to the Kharma Elegance S-7 loudspeakers tested in parallel. It is a not very large, 2-way floor speaker with a beryllium tweeter, 7-inch mid-woofer, ventilated with a bass-reflex directed to the rear. It's just that it is an 8-ohm design, but with an efficiency of only 86 dB.

After listening to them in my own system, I decided to check how the 60 or 120 W Allnica would perform in driving difficult Dutch loudspeakers. I would like to add that these are designs, for their size, with a solid bass base , so they require an amplifier that can keep them in check. The loosening of the control results in a slight, but still noticeable, dominance of the low end, which is not very precise. The T-2000 30th Anniversary on paper has enough power to deal with them even in triode mode.

Listening in this mode caused me contradictory feelings . On the one hand, the excellent, delicate, but clean, precise, beautifully sonorous treble offered by the tested amplifier perfectly matched the extremely resolving, precise and expressive Kharm beryllium dome. The result was a perfect combination of these features, and thus the presentation of high flights, extremely effective, but not at all flashy. On the other hand, however, the control of this strong, active low end was not as good as I would have liked.

The triode introduced in this range its own weight, timbre, good differentiation, but also softness, which in this combination was not, of course, desirable for my ear. To put it another way, the control of the woofer was not good enough, which resulted in the additional effect of bass-reflex "rumbling" or dragging bass sounds, which I did not like so much. It was not particularly big or clear, for people who are used to such a sound, it probably would not even bother it, but it was sufficient that someone oversensitive about it (me) would have a problem with it.

Only switching to the pentode mode, ie doubling the maximum output power of the T-2000 30th Anniversary, gave the desired effect. The good (though not perfect) control and definition of the bass , which I knew from listening sessions with the GrandiNote Shinai solid-state amplifier, returned. The bass was still colorful, dense, but also tight and fast enough that the impression of the bass-reflex in the reproduction of music disappeared. The treble lost a bit of the unique, so attractive delicacy, even etherealness offered by triodes, but it gained energy and definition, which can be heard, for example, in the strokes of the sticks on the cymbals of the percussion.

The whole sounded dynamic, coherent, as befits a good tube, rather smooth and still on the warmer side of the power. Now, however, the deviation from absolute neutrality was really small. There was no question of artificial warming and smoothing anything, but rather the natural sound of the instruments. The conclusion from this part of the listening session was that it is a good combination, even if not perfect. I would like to combine this, or even better - a triode, treble and midrange with full control of the bottom of a good transistor.

Before I went to the main part of the listening session, ie the one in which the MACH4 speakers were used, I connected the Ubiq Audio Model One Duelund Edition to the Allnic Audio integrated. This is, as a reminder, a large, three-way design in a closed housing, and despite the size and lack of a gun, it is definitely easier to drive than the Kharmy. Despite this, and with these speakers, I preferred the pentode mode, offering slightly better control and definition of the lower part of the band. It is true that even in the triode mode the bass was sufficiently tight and fast, it could not be attached to the timing, but in the pentode it was slightly better differentiated, more precise, better weighted also at the very bottom of the band, and therefore more interesting.

The treble in this mode was a bit more expressive, with a bit more pronounced attack than in the triode, but the assessment of this difference was more a matter of taste, personal preferences than considerations in the category of objective, as far as possible, better / worse. On the plus side of the triode, I would definitely include the midrange , more tangible, more colorful and relaxed. The latter feature was later confirmed with the GrandiNote packs - the pentode mode has its advantages, but the triode makes the sound friendlier, better "enters", better for long hours of listening to music for pleasure. Of course, my personal preferences played a role here, but I think others might also agree.

When it finally came to the "final" listening session, ie connecting the Italian MACH4 loudspeakers that I use most often, I did not hesitate to compare the two operating modes of the T-2000 30th Anniversary, even though they are easy to drive packages . Again, it turned out that they prefer (I mean really me) triode mode . These are loudspeakers that sound with a fast, dynamic, clean, quite direct sound, so the similar nature of the pentode mode strengthened these features. It was clean, energetic, with an absolutely confident bass, very well-differentiated, tight, reaching as low as only these speakers can, but the bass did not have such a rich texture, it was not as saturated, as colorful as with the amplifier in triode mode.

The treble and midrange in the triode were also fuller, more colorful, they had this unique "triode" delicacy combined with sonority and high energy. In the pentode, sounds both in the midrange and treble were a bit harder, more direct, there was less (not much, but still) decay behind the sounds themselves, a bit less air around the instruments. In the triode, the presentation was a bit less precise, there was not such a good insight into every detail of the recording, but it was more present, tangible , presented in an even more vivid and spatial way.

It is not even about the objective superiority of one presentation over the other, because both were excellent, but different enough to make it clear that my preferences and expectations towards sound were more fully satisfied by the triode mode (which was no surprise). At least when I listened to acoustic and vocal music .

Well - vocals ... I haven't actually mentioned them yet. Regardless of the mode, they were full of emotions, focused my attention, became the center of the presentation. Regardless of the mode, but more in triode :) But when it came to music that had to be played on a large scale - let's say symphonies - where dynamics in the macro scale played a significant role - still symphonic, operas, but also rock - it was enough to press the button to turn on the pentode mode and get these elements given in an even better, more convincing way than in a triode.

It was the listening sessions, in which I often changed music genres, that best showed how fantastic it is to be able to change the operating mode of the output stage without turning off the amplifier, waiting for it to warm up again.

SUMMARY

IT CANNOT BE HIDDEN that Allnic Audio T-2000 30th Anniversary is quite an expensive integrated and additionally only an integrated, ie it is its only function - there is no built-in DAC, phono preamplifier, streamer, etc. It has its obvious advantages - all the time, effort and cost invested in developing it have been focused on getting the best possible sound . As in the case of the Amber cartridge and the H-5500 phono preamplifier, Mr. Kang Su Park did not disappoint my expectations, or even exceeded them. He created an amplifier that for many people may be the (conventionally) last in life, in absolutely high-end systems.

Not only does it have the power that is enough to drive most loudspeakers, but in addition, we actually get, in a sense, two amplifiers in one . I mean, of course, two modes of the output stage, both excellent, both different enough to be used depending on your preferences, mood, or the music being played at the end. The T-2000 30th Anniversary offers a refined sound, extracting a huge amount of information from the best recordings, weaving from them colorful, extremely coherent, fluid musical stories that are difficult to break away from. Especially in triode mode.

The pentode mode is perfect when the music needs a "kick", pardon, when it needs to be played with momentum and energy, when the key in the entire frequency range is control. The T-2000 then gives a presentation that is stimulating like a good espresso, setting in motion the limbs, which involuntarily tap the rhythm. And this happens even when playing recordings that are not entirely audiophile, because it is difficult to include most rock, hard-rock or even blues discs in this category.

Integra Allnic Audio does not focus on the problems of such realizations, but rather tries to focus the listener's attention on music and having a good time.

The T-2000 30th Anniversary is an excellent amplifier , one of the best integrated amplifiers that I have heard so far, which with its design, workmanship and sound will perfectly fit into many very high-end systems and will stay in it for many, many years. . ■