

# ALLNIC AUDIO A-2000 MK 3 TUBE POWER AMPLIFIER – FIRST REVIEW! August 23, 2025 by <u>Howard Milstein</u>



The Allnic Audio A 2000 MK 3 Tube Power Amplifier has just recently been released! It is a Class AB power amplifier (A-2000 MK 3 version). The developers are using the new *Tung-Sol KT170* tubes, and their output power is 120 W in pentode mode and 60 W in triode mode. *Allnic* has employed one tri-connected 5654 pentode tube per channel, which is used in the first stage to provide 26 dB of voltage gain, and two 6S4 triode tubes per channel are used as the phase-inverting and excitation tubes to push-pull the KT170 output tubes. Also in the A-2000 MK 3, engineers used two proprietary Allnic output transformers with a permalloy core, one per channel.

In the context of vacuum tubes, "triode mode" refers to using a pentode tube by essentially disabling the additional grids, making it function like a simpler triode. This usually results in a warmer, more harmonic-rich sound but with reduced power output and efficiency; in

other words, it's a way to change the sound characteristics of a pentode by limiting its functionality to that of a triode through circuit design. "Pentode mode" refers to using a tube with all of its electrodes active, including the control, screen, and suppressor grids. Here are some essential details regarding triode and pentode modes in the Allnic A-2000 MK 3 amplifier. (also see the review of the 25<sup>th</sup> Anniversary amplifier.) I listened to here on an earlier date!)

#### Number of grids:

A triode has only one control grid, while a pentode has three grids: a control grid, a screen grid, and a suppressor grid. Triode mode often produces a richer, slightly warmer, more "vintage" sound with a bit more harmonic distortion, while pentode mode provides a somewhat cleaner, more linear sound with arguably less distortion.

### **Power output:**

Pentode mode generally delivers higher power output due to its more efficient design, while triode mode provides less power, but in SOME cases, sounds better!

#### Application:

The Allnic A-2000 Mk 3 amplifier has a "pentode/triode switch" which allows the user to choose between the different sonic characteristics depending on their desired sound. The <u>Tung-Sol KT170</u> is a high-end beam power tetrode vacuum tube designed for use in the output stages of high-quality audio amplifiers. It boasts a significant power dissipation of 85 watts, which allows amplifiers equipped with a pair of these tubes to achieve power output levels exceeding 300 watts. This makes it the most powerful tube in its class, surpassing its predecessors like the KT120 and KT150 in terms of power handling capabilities.

This Tung-Sol KT170 features an original-shaped glass bulb with a large glass envelope, measuring 137×68mm (5.5×2.6 inches). It was designed to maintain a high vacuum and dissipate heat effectively when operated at high power levels. This design not only aids in thermal management but also contributes to the tube's reliability and sound quality. It includes an equipotential cathode for increased reliability and to effectively amplify audio frequencies.



A few reviews of the KT170 tube generally speaking, praise its powerful and full-bodied sound, with good bass, a nice wide soundstage, and a detailed midrange, It might be considered a significant upgrade over other tubes like the *KT150*, particularly when used in high-end audio equipment, with many noting its large size and ability to deliver high power with good fidelity; however, some users may need to consider the potential for increased heat generation due to its size.

It is the perfect option for demanding audiophile applications due to its immense power handling, thermal control, and ultra-linear operation. A tenure of virtuous performance and tonality is guaranteed by the KT170's dedication to quality and dependability. But, how these tubes and the amp itself sound subjectively remains to be described in this review below!

#### SUBJECTIVE PERFORMANCE

It will be informative to know that the new Allnic A-2000 MK 3 amplifier should and will be compared to the previous model we reviewed here in The Sound Advocate; namely, the Allnic A-2000 25<sup>th</sup> Anniversary SE amplifier, which uses four KT150 power triode tubes, four

6S4 second-stage drivers, and two 5654 tubes. This brand-new unit has the advantage of the new KT170 tubes, which offer more power and linearity than the KT150 tubes of the previous model. Does this new configuration meet the demands of the most discerning audiophile? Let's explore this in more detail, shall we?

As a tube power amplifier, the A-2000 MK 3 stands out in some most specific ways. It has a lovely, all-encompassing power reserve in its pentode mode and will drive virtually any speaker it can be connected to. It displays, most if not all of that tube's "atmospheric and lush sound quality' in all areas of the frequency spectrum.

The unit displays great transparency and a full-bodied quality to almost all of the "best program' sources that were applied to it. On the other hand, this new KT170 tube format can sometimes trick you into thinking it is a "solid state' power amplifier, particularly in Pentode mode. (My auditioning found slight variations in Triode mode, but no significant differences in sound quality!)

It thereby produces robust, powerful, and unrelenting sound attributes; yet while it does not have the subtlety of the KT150 tubes, it stands its ground with a wide, focused sound stage and superb detail. Alternately, it does have a touch less of the 'romantic" quality and harmonic distinctiveness of the KT150 tubes, but it still shines brightly in its overall performance characteristics. This amplifier's sound reveals what I would consider the best cross between tubes and the solid-state world.

The Allnic contains the robust and a non-forgiving brilliance and "intricacy" of the best solid-state amplifiers, while exhibiting a "touch" of that loving "tube" quality of some of the best tube amplifiers I have used. I am suspecting the new "KT170 power triode tubes as the possible reason for this.

Even after a long time of warm-up, maybe an hour or so, these tubes still seem to portray some of the musical sonic picture that only a first-rate solid-state unit can bring across. In other respects, however, it produces a huge bass response, significant depth and width, and an open soundstage with the loudspeakers it was mated with. (Q Acoustics Concept 500s).

The center imaging was outstanding, and all the stereo focus was there in spades to enjoy and listen to. This amplifier is going to be a blessing to audiophiles who are deeply involved in Class A or AB sonic portrayals, while showing a small bit of tube prowess and warmth in the process.

However, as mentioned above, it is not for the sonic "tube' purest, but the enthusiast who desires a "mix" between tube and solid-state reproduction (particularly in Pentode Mode). I must reiterate that it could well be the sound quality of the new KT170 tubes as the reason we get such a nice balance between classic Class AB and most, *if not all*, of the subtle lushness of the finest KT150s or KT88 tube reproduction.

Admittedly, the KT170 tubes do need lots of break-in time, and in my opinion, cannot currently equal the brilliance and lushness and authority of the KT88 or KT150 at the current moment. But this is so subjective that each individual must experience this on their system and room.

Due to variations in internal construction, manufacturing quality, and aging, which impact how well a tube amplifies a signal, some tubes sound better than others. A tube's performance and tonal qualities are greatly influenced by its age, usage, and noise-blocking capabilities, as well as by how it is paired with other tubes and the amplifier's circuit.

The sound of the tube is affected by the materials and design strategies used by different manufacturers, such as the interior plates' construction methods or the existence of internal insulation. Allnic has considered all this when designing the new A-2000 MK 3 power amplifier. And they have done a terrific job as per the amplifiers' overall sound and sonic presentation with as it showed its great prowess with both digital and analog program sources that were thrown their way!



#### CONCLUSION

The A-2000 MK 3 KT170 Power amplifier is Allnic Audio's top-of-the-line, push-pull, tube rectified stereo power amplifier model. The A-2000 MK 3 is an authoritatively upgraded version of the original A-2000, and it utilizes the new, powerful, and musical KT170 power tube, a beam tetrode, with requisite modifications to transformers, a newly redesigned heavy-duty, vibration-resistant chassis, and several minor circuit elements. This Amplifier has been used in my current reference system for almost 12 months, while frequently swapping it with a few solid-state alternatives in the mix. (Namely the Pass Labs XA 30.8 and the newly introduced Argent/Pur monoblocks).

I enjoyed this KT170 tube amplifier very much and can surely give it a solid thumbs up in exhibiting all its sound characteristics and the beauty it has displayed to all the musical sources I have let it explore.

The Allnic is a "beast" as to its large power output, subtle midrange, and huge bass response. It is meticulously built and weighs in at a huge 80 pounds! I would question only its purity of the output tubes of the new KT170s as they do not exactly exhibit the lush, romantic, and subjective sensuality of its Anniversary amplifier, which uses the KT150 tubes, or other units which employ the gold standard KT88s, in their pentode or triode mode.

Having said that, the Allnic A-2000 MK 3 is a wonderful power amplifier that can drive just about any speaker on the planet. There were times when reconnecting this unit, that I was convinced that it OUTSHINED, my Pass Labs XA.30.8 Class A,,,, that's how it kept me glued to the music in its entirety. I could live with this amplifier for a long time, for it gives me the sincere demeanor of its beautiful tube sonics, and yet keeps you glued to your seat with its explosive dynamics and the sonic "attributes" of the best of solid-state design; **HIGHLY RECOMMENDED!** 

Program material used for this evaluation:





Equipment used for this review:

SCHUBERT

Symphony No 5 in B flat, D483 MENDELSSOHN

Loudspeakers: ~ Q Acoustics Concept 500 loudspeaker ~ Digital: Mojo Audio 'Mystique' X DAC ~Musician Pegasus II R2R DAC ~ Holo Audio CYAN 2 DAC (to be reviewed soon) Innuos Statement server/streamer ~ Audio Note (UK) CD3.1x/2 player/DAC Analog: Audio Technica LP-7/ZYX Bloom 3 mc cartridge Amplification: ~Pass Labs XP-12 preamp, Pass Labs XA30.8 power amp Argent/Pur Mono-block amplifiers~ Cables/

**Conditioners:** Inakustik AC-3500p power station &, AC-2404 reference Air Power Cord ~ **Audience Front Row** speaker cables and interconnects ~ Clarus "Crimson" 75-ohm digital spdif / Audio Art 1 e" AC Power Cord

Kevalin Audio handles distribution, and product information can be found there: Www.kevalinaudio.com

## MRSP \$15,950 USD (worldwide)



## **Specifications:**

- 120w (8Ω load, at 1KHz) Pentode
- 60w (8Ω load, at 1KHz) Triode

#### **Distortion:**

• 0.17% at 1KHz at 10w

#### **Frequency Response:**

20Hz- 20Khz

## Tubes (per chassis):

- KT170 x 4 (power tube)
- 6S4 x 4 (or 6S4A second drivers

## S/N Ratio:

- -80dB (CCIR, 1KHz)
- $\bullet$  8 at 8 $\Omega$  load at 1KHz

## Voltage gain:

• +26dB

# Input Impedance:

• 100K $\Omega$  (single-ended, unbalanced)

## **Input Sensitivity:**

• 1.3V for maximum rated power

#### **Fuses:**

Mains: AC 5A, 250V slow-blow for 110/120V regions; AC 3A, 250V slow-blow for 230/240V regions

KT170: 0.5A, 250V, 20mm slow-blow

#### **Dimensions:**

• (W x D x H) 440mm (17 inches) x 480mm (19 inches) X 300mm (12 inches)

# Weight:

• 36Kg (80 lbs) net • 41Kg (90lbs) shipping weight