

**Cayin's \$1295 Integrated  
Dual-Mode A-50T Amplifier  
A New Classic!**

Review By A. Colin Flood

I heard a copper faced Cayin TA-30 drive big ole horns at a Klipsch gathering in Arkansas two years ago (thanks, Daddydee) I was so favourably impressed, I jumped like a frog to review this Cayin amplifier! The silver and black Cayin (pronounced "Kai-an") A-50T is a beefy, Chinese-built, \$1295, integrated amplifier, with both triode and ultra linear modes. It is rated at 16-watts per channel, in triode mode, with a remote control. The A-50T is a classic tube Marantz 8B or Dynaco Class B tube design with EL-34 power output (four), 12AU7 and 12AX7 (two each) input tubes. Ron Nagle reviewed the [A-50T's bigger brother](#) in the December 2006 issue.



One glance at the A-50T however, and I had to compare it to [Antique Sound Lab's AQ1003 DT Integrated Amplifier](#), which I reviewed two years ago. The AQ is a very similar integrated tube amplifier. It delivers 30-watts, using the same tubes, but derived from Class A electrical topology, for almost the same price. "This is how," I wrote then, "amplifiers should be built: beefy, powerful, yet sweet and delicate; with fun-to-use bias and remote controls; and relatively low-cost. A very good value for sound and quality."

Although the power output tubes are the same on both amplifiers, the transformers are larger on the AQ1003DT. Most of the time, I listened to the AQ1003DT on the solid-state powered sub-woofers of [Aperion's \\$599 Intimus 522D-PT Powered Towers](#), in a small, bright, but open room. Unfortunately, these two amps did *not* co-exist in the same room, with the same speakers, at the same time. Only the music and reviewer are the same. I did *not* "hear the A-50T back-to-back with the AQ to be able to honestly say which one I like better." So much for a rigorously-controlled, scientific-listening experiment.

Cayin manufacture their amps in ZhuHai, close to Hong Kong, China. US models are voiced by VAS for the US domestic market. There are 50 Cayin authorized dealers in the U S. VAS maintains a complete inventory of most products. There are some products that are special orders. Special orders take up to 60 days.

The amplifier came double-boxed in 2-inch of Styrofoam, with a pair of white cotton gloves to handle the tubes. Like the AQ, there is a thin, gray Dove-bar size remote control; a modern feature which adds considerable ease of use to classic components. While there are two sets of beefy taps on the rear, for 4 and 8-ohm connections, the A-50T does not have the sub-woofer outputs of the AQ. The tube sockets are labeled, but the tubes come installed and wrapped in Styrofoam. The black tube cage pops off easily, allowing quick adjustment to the bias pots.

Unlike the AQ, there is no easy-to-use bias meter however. You have to stick the probes of a voltmeter into holes by the tubes in order to get bias readings. The A-50T transformers are labeled in gold and the power cord is detachable for tweaking audiophiles seeking to improve their unit.

Overall the Cayin, like the AQ, provides a very favourable impression of solid quality, blended with excellent value.

The Cayin importer is VAS Industries. Steve Leung is President of VAS for over 3 years. (He is also an Aurum Cantus Ribbon speaker importer too.) He is an audiophile for over 25 years. He loves the warm and musical sound of tube amplifiers. VAS is located near Newark, NJ.

Leung says tube amplifiers are better today than years ago. "Today, he says, we make better power transformers, better output transformer and utilize hand crafted point to point wiring. Sound quality is much better than older tube amps! The technology improving "with higher quality components."

This A-50T unit was opened and checked out before shipment. He suggests a break-in of approximately 50 hours and a warm-up time of approximately 30 minutes. In fact, the A-50T did seem harsh when first powered-up. When the A-50T starts up, it defaults to the CD source. It takes 30-seconds to operate fully, during which time the blue light on the volume knob blinks. When the blue light is solid, the unit is ready to crank. During power-up, the selector knob can *not* turn to another source. You have to wait for the A-50T to power up completely before turning its selector knob. So while you are waiting to select the source, you can load the video or music disc.

Cayin doesn't generally recommend any special treatment or placement of the amplifier. They feel the amplifiers' own footers are enough. **Special amplifier stands** however, can make a difference as well as tube dampening rings. But, Cayin says, this option is "up to each user's ears." If you use tube damping rings, Cayin suggests using them on the driver tubes only.

Interestingly enough, the A-50T switches on the fly from its ultra linear to triode mode with the gray remote control. Big ole horn loudspeakers are so amazingly efficient that a mere two or three-watts drives most music in most homes. Low powered, single ended triode (SET) tube amplifiers therefore, are a wonderful option for tweaking audiophiles with big ole horns (See my **reviewer's bio** for the context of all reviews.)

## On The Fly Triode

SET design is simple, elegant, requires very little manipulation and produces an easy listening second order distortion which our ears equate with acoustic instruments. A push-pull style tube amplifier however, splits the signal into two halves and then recombines the halves in its output. The single 12AX7 tube stage in a tube pre-amplifier is a SET design. Most great audio tube preamps are SET designs.

The VAS web site says the triode mode is "the 'BEST' way to listen to tubes. Although the [triode] output decreases, the bandwidth increases, the distortion decreases, and damping factor increases as compared to PENTODE operation." Big ole horns are so amazingly efficient that a mere two or three-watts drives most music in most homes. Low power SET amplifiers therefore, are a wonderful option for tweaking audiophiles with horns.

Ultra linear mode, the VAS site says, is a superb compromise between the simple triode and five-stage pentode tubes. "The output power is more than TRIODE, yet you have most of the benefits of triode. You have better linearity, greater damping factor, and lower distortion, but virtually the same power output as pentode" style amps. In ultra linear mode, the A-50T doubles its output, to 35-watts. It sounded a lot more powerful than that.

The tubes selected for the Cayin A-50t are matched for most musical and dynamic sound. "We have tried most the new tube available today." The tubes should last for 3,000 hours due to their low bias setting. Bias is set for 0.3 volts, so a small multi-meter is required to read the tube voltage settings. Tweaking audiophiles know when their tubes are wearing out, Leung says, when the sound is slow or the high frequency rolls off.

Cayin thoughtfully provides a single white, soft cotton glove. The glove is *not* so tweaking audiophiles can dress like Michael Jackson. It is for handling the tubes. Oil and dirt from our greasy palms *may* wear down the delicate glass of hot tubes. Although actual damage is part of the folklore and mysticism of tube audio, the added glove is nice a nice touch. Wiping dust and fingerprints off the tubes with a moist, soft cloth works fine.

The amps are stable with 4-ohm, down to 2-ohm, loads. Using 20-ampere electrical service is certainly an audiophile tweak, Leung suggests, but worth it.

## Comparisons

First impression of the A-50T is one of comfortable capability. Its 28+ hefty pounds, three large silver knobs, effortless sound and modern features make it seem like a far more expensive amp. The A-50T has unmistakable tube sound and capabilities, without any severe deficiencies. On Holly Cole's *Temptation* (Capitol, 1995), for example, there is clearly sweetness in the vocals, with plenty of mid-bass. Horns sound like horns. They are bright and brassy, with all the snap and class of Buckingham Guards.

Movies and music glow with A-50T's lights. Its presence infects the house. Tube amps get a hard work-out in this household: they are always on. First a little "release the steam" music after a hard day at work. Then some more mellow, "let's make dinner" jazz tunes. Finally, a video disc from Blockbuster. Action or drama mostly – sometimes comedy. This stereo is on all night long and most of the weekends too. Ears never wear out with tubes on big ole horns and the A-50T is no exception.

Compared to the AQ1003DT, my Bottlehead 2A3 Paramours and refurbished Scott 299C integrated amplifiers -- all of which I've heard at least briefly on big ole horns -- the A-50T is a heavier, slightly more expensive unit, with unique and easy-to-use modern features.

The handy triode/ultra linear (TR/UL) button on the gray, dove bar, remote control made for wonderfully instant comparisons between the two modes. Push the button and the A-50T switches an LED on the front panel and changes its circuitry mode; amber for triode and orange for ultra linear mode. Slick. At first, the difference between the two modes at low volumes on both horns and cones seems slight. Switching between the two modes is not as revealing as I expected. One mode is *not* clearly better sounding, with movies or music, as I expected. Only different.

Yet after a while, the orange UL mode seems like a loudness switch. It seems to re-shape response curve, lifting the mid-bass, sharpening the treble and bringing voices forward. In that respect, the orange UL mode is better at low volumes (*not* what I expected). At normal to loud volumes, with peaks in the mid-90db, the middle-range on UL mode seems too strident, brittle and the treble grates. Otherwise, on long-time favorites like Diana Krall's wonderful **Stepping Out**, there was *not* an appreciable difference in details or definitions between the two modes. Switching to the award-winning, delicate **DACT Dual** gold patch cords made just as much difference.

Even in triode mode, my Dynaco and Paramour amplifier combination is still slightly sweeter and more delicate than the A-50T, but 2A3 tubes are too low powered for all but the most ultra-efficient loudspeakers. With its integrated pre-amplifier, the A-50T is a very good value for most audiophiles. It is solid and powerful, with stronger mid-bass, powerful enough for my bookshelf speakers, but without the Nth degree of delicacy and mid-range smoothness of the Paramours' 2A3 tubes.


















Compared to a beast like the **Delta 6s**, the A-50T has the enjoyable tube sound. It does *not* have the wide soundstage, mid-range nuances and strong mid-bass control of the massive Delta 6s, but then it is only a quarter of the weight and the price! If bass is where you live, the tube amplifiers I have heard with big ole horns do *not* have the cement-solid feel of even a modest solid-state amplifier, and the A-50T doesn't change that. Yet, like the Delta 6s monster, its music too is like the live event. Neither one may *not* be as accurate, but music is more enjoyable than listening with modestly priced solid-state equipment. Of course, the A-50T is more musical on big ole horns, but on my cone speakers, it had enough of the high and mid-bass to satisfy. I am *not* switching from my passive bi-amp set-up, but if I was starting over, an amplifier like this one might be all I ever need.

## A Reborn Classic

I grade slavishly. Only where the review equipment unit is "very good" – performing above average, will I confer four Blue Notes on the *Enjoy The Music.com* categories. The unit must work as hard for that score as a migrant worker in the noon-day sun. The A-50T is no exception. Across the board I thought this was a very good, all-around and capable performer. In my own personal category, Enjoyment, the A-50T scores 4 Blue Notes. I enjoyed the value it gives for the price. The A-50T is very good tube sound, at an excellent price. It will *not* be the weakest link in any normal audio/video chain with typical speakers, room or demands.

Two years ago, I said there was "very little to buy in the way of excellent tube pre or power amplifiers with good looks, hefty build, decent sound quality and modern features." Now, there are several excellent choices from Antique Sound and Cayin.

Cayin's robust and practical construction, design and price are solid. The small remote control and TR/UL switch is addicting. This is one hard-to-beat modern version of a classic amplifier! Without any unusual demands, any tweaking audiophile would be proud to own, listen and enjoy this amplifier for a very long time. It is solid, strong sounding, yet sweet and delicate enough, with tube bias adjustment and remote control; making it a very good value for sound and quality. This integrated EL-34 unit is a winner at great price point.

Tonality	
Sub-bass (10Hz - 60Hz)	
Mid-bass (80Hz - 200Hz)	
Midrange (200Hz - 3,000Hz)	
High-frequencies (3,000Hz on up)	
Attack	
Decay	
Inner Resolution	
Soundscape width front	
Soundscape width rear	
Soundscape depth behind speakers	
Soundscape extension into the room	
Imaging	
Fit and Finish	
Self Noise	
Enjoyment	
Value for the Money	

## Specifications

Type: Vacuum tube stereo integrated amplifier

Tube Compliment: four EL-34 output tubes, two 12AU7 and two 12AX7

Power Output: 35 watts per channel, 16-watts/channel (Triode mode)

Frequency Response: 10Hz to 50 kHz

Ultralinear or triode mode selection from remote control

S/N Ratio: 89dB

THD: 1% (1kHz)

Input Impedance: 100K ohms

Input Sensitivity: 370mV

Output impedance: 4 ohm or 8 ohm output connectors

Other Features:

All tube amplification throughout

Hand made chassis

Point to point wiring

Remote control

Protective cage included

Warranty: 3 years parts & labor, 90 days on tubes

Dimensions: 14 x 7 x 12 (WxHxD in inches)

Weight: 28.6 Lbs.

Price: \$1295USD