









DIRECTORY OF HIGH-END AUDIO **MANUFACTURERS**









Never be the Same Again

Master Quality Digital Audio Player



N5iiS

Android with Google Play Streaming App ready



Audio Priority Stainless Steel







USB Audio (DAC+Transport)



Embedded SE Line Out

















Internet & OTA

64GB+400GBx2

~ 12 Hrs

117x59x15.3(mm)

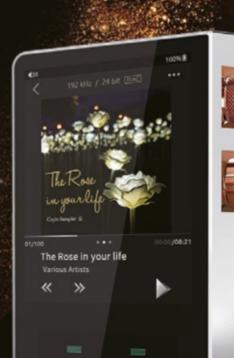














A Reference DAP offers choice of Triode Tube / Solid State





Timbre





4.4mm BAL

Phone Out



SE/BAL

Desktop Line Out



upto 96kHz







AK4497EQ x2

TITI-32Bit/384kHz

3.2"

Stainless Steel IPS Touch Screen 128GB+512GB

Dual Output









USB Audio (DAC+Transport)



Embedded Coaxial





















CONTENTS

Foreward from the publisher

Directory A-C Accessories, Analogue Sources, Cables

Directory D-L Digital Sources, Electronics. Loudspeakers

Directory P-Z Personal Audio. Personal Audio Electronics, Power Products

Allnic Audio

AURALIC

Brian & Trevors

Burmester Audiosysteme GmbH

Cardas Audio

Cayin

CH Precision

Critical Mass Systems

Crystal Cable

ELAC

Engström & Engström

Ensemble

Gold Note

Graham Audio

Grand Prix Audio

Innuos

Lavardin Technologies

Lindemann Audio

Linn

Merging Technologies

Monitor Audio

Neat Acoustics

Nordost Corporation

ProAc

Purist Audio Design

Roon Labs

Shunyata Research

Siltech

SME Ltd

Warwick Acoustics

WBT - Industrie GmbH

DIRECTORY OF HIGH-END AUDIO MANUFACTURERS 2019



PUBLISHER, HI-FI+

Pete Collingwood-Trewin

Tel: +44 (0)1425 655699

Email: pete@hifiplus.com

EDITORIAL DIRECTOR

Chris Martens

Tel: +1 (512) 419-1513 Office

Tel: +1 (512) 924-5728 Mobile

Email: cmartens@nextscreen.com

EDITOR, HI-FI+

Alan Sircom

Email: editor@hifiplus.com

CONTRIBUTING WRITERS

Alan Sircom

Nicholas Ripley

Chris Martens

Michael Mercer

GRAPHIC DESIGNER

Steve Crabb

SCDesign, Bournemouth

Tel: +44 (0)778 9647435

Email: stevecrabbdesign@yahoo.co.uk

ADVERTISING

Tom Hackforth

Tel: +44 (0)1425 655255

Email: tom@hifiplus.com

THE EDITORIAL OFFICE CAN BE CONTACTED AT:

Hi-Fi+ Editorial

Absolute Multimedia (UK) Ltd

Unit 3, Sandleheath Industrial Estate, Sandleheath,

Hampshire SP6 1PA

United Kingdom

Tel: +44 (0)1425 655255

Web: www.hifiplus.com

Absolute Multimedia (UK) Ltd is a

subsidiary of TMM Holdings LLC,

2601 McHale Court, Suite

Austin, Texas 78758, USA

CHAIRMAN AND CEO

Thomas B. Martin, Jr.

All Rights Reserved.

Copyright 2018. All rights reserved.

Not one word of Hi-Fi+ may be reproduced without the writen consent of the Publisher. We are perfectly happy to co-operate, but we don't want quotations to appear out of context.

Hi-Fi+ product-themed Guides are published in digital format only, two times per year by: Absolute Multimedia (UK) Ltd.

DIRECTORY OF HIGH-END AUDIO MANUFACTURERS 2019

elcome to the Hi-Fi+ Directory of High-End Audio Manufacturers. As publishers and editors of a respected magazine whose focal point has always been "Reproducing the Recorded Arts" we are often asked for advice on choosing new pieces of audio equipment or for our recommendations on manufacturers to turn to for help in solving audio problems. But that raises some key questions of importance for all music lovers and audio enthusiasts:

Just who are the manufacturers. whether well known or perhaps not (yet) so well known, who offer products and services geared for the needs and desires of discerning audiophiles?

What exactly is the scope of products those worthy manufacturers have on offer? And do they have readily identifiable areas of specialisation that audiophiles need to know about?

What are their various product design philosophies and what approaches do they take as they strive to build products that will amaze and delight music lovers?

Further, who are the people behind the products-the 'movers and shakers' who bring product ideas to reality?

Last but certainly not least, how can journalists and enthusiasts alike get in touch with our industry's specialty manufacturers?

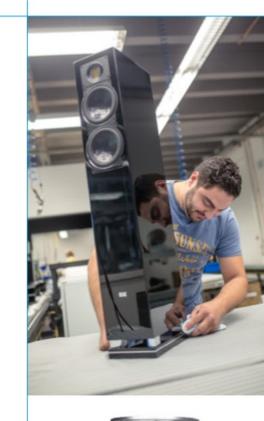
What you have before you is a directory listing, in alphabetical order, 32 manufacturers we think you'll want to know about. Each listing will give you a good idea of who the manufacturers are and what they do, but by design-and in accordance with manufacturers' wishes-some listings are more elaborate and comprehensive than others. What is more, a handful of listings include manufacturer interviews, so that, as we mentioned above, you can get to know "the people behind the products."

We hope you will find this directory useful and thought provoking in the best of ways. After all, the first step toward building an audio system that's right for you involves knowing more about what's out and from whom. We can help with that.

If manufacturers you care about are not included here, please tell them about the directory and that you'd like to see them in it. After all, we will produce future editions of the directory and, like you, would like to see it grow over time

Best wishes.

Pete Collingwood -Trewin (Publisher) & Chris Martens (Editorial Director)





E

M

THEME DIRECTORY



ACCESSORIES

- ▶ Acoustical Treatments
- > Analogue Set-up/Tuning Tools, Accessories
- Digital Set-up/Tuning Tools, Accessories
- ⊳ Equipment Racks, Audio Furniture
- > Power-related accessories
- Allnic Audio
- Burmester Audiosysteme **GmbH**
- Cardas Audio
- Nordost Corporation
- Critical Mass Systems
- Shunyata Research
- Ensemble
- ▶ WBT Industrie GmbH
- Grand Prix Audio
- Lavardin Technologies
- Merging Technologies



ANALOGUE SOURCES

▶ Analoque Accessories

▶ Phono Stages > Tape Decks

> FM Tuners

▶ Tonearms ⊳ Phono Cartridges ⊳ Turntables

- Allnic Audio
- Brian & Trevors
- Burmester Audiosysteme GmbH
- Ensemble
- Gold Note
- Grand Prix Audio
- Lindemann Audio
- Linn Products
- SME Ltd

CABLES

- > Accessories, Cable Lifts > Analogue Interconnects
- ▶ Digital Interconnects
- > Loudspeaker Cables > Personal Audio Cables
- > Power Cables
- Allnic Audio
- Burmester Audiosysteme GMBH
- Cardas Audio
- Cayin
- Crystal Cable
- Engström & Engström
- Ensemble
- Lavardin Technologies
- Linn Products



- Nordost Corporation
- Purist Audio Design
- > Shunyata Research
- Siltech

DIGITAL SOURCES

- CD/SACD/Blu-ray players/transport
- DAC/Preamps, DAC amps
- Digital Accessories
- ▶ Internet/DAC Tuners
- D Streamers, Servers, Wireless Bridges
- Allnic Audio
- AURALIC
- Burmester Audiosysteme GmbH
- Cayin
- CH Precision
- Ensemble
- Gold Note
- Innuos
- Lindemann Audio
- Linn Products
- Merging Technologies
- Roon Labs



- CH Precision
- Crystal Cable
- Engström & Engström
- Ensemble
- Gold Note
- Lavardin Technologies
- Lindemann Audio
- Linn Products
- Siltech
- Warwick Acoustics



LOUDSPEAKERS

- ▷ Active (Self-Powered) Speakers▷ Architectural Speakers

- Desktop Speakers
 ► Floorstanding Speakers
 ► Stand-mount Monitors
- Allnic Audio
- Burmester
- Audiosysteme GmbH
- Cayin
- Crystal Cable
- Engström & Engström
- Ensemble
- Gold Note





- Lavardin Technologies
- Lindemann Audio
- Linn Products
- Monitor
- Neat Acoustics
- ProAc
- Siltech







ELECTRONICS

> Preamplifiers, Preamp/DACs

▷ Integrated Amplifiers, Integrated Amp/DACs
 ▷ Headphone Amplifiers

> Phono Stages

> Power Amplifiers

Allnic Audio

Burmester

Audiosysteme GmbH

AURALIC

ACCESSORIES ANALOGUE CABLES

DIGITAL ELECTRONICS LOUDSPEAKERS

PERSONAL AUDIO PERSONAL ELECTRONICS POWER PRODUCTS

PERSONAL AUDIO

D Custom-Fit In-Ear Monitors

▷ Earphones (In-Ear Headphones)

▷ Full-Size Headphones

▷ Wireless Earphones (In-Ear)

Allnic Audio

PERSONAL AUDIO **ELECTRONOICS**

▶ Accessories

Desktop Headphone Amplifiers

Desktop Headphone Amp/DACs

▷ Portable Digital Audio Players

▷ Portable Headphone Amplifiers

▷ Portable Headphone Amp/DACs

Allnic Audio

Cayin

Nordost Corporation

Warwick Acoustics







POWER PRODUCTS

▷ Grounding Systems, Noise Filters
 ▷ Other Power Accessories

Power Cables

Power Conditioners

▶ Power Regenerators

D Power Strips

Allnic Audio

Burmester Audiosysteme GmbH

Cardas Audio

Crystal Cable

Engström & Engström

Ensemble

Lavardin Technologies

Merging Technologies

Nordost Corporation

Shunyata Research

Siltech









ACCESSORIES ANALOGUE

PERSONAL AUDIO PERSONAL ELECTRONICS
POWER PRODUCTS

CAYIN



CAYIN

Cayin was founded in 1993. While our products carry a distinctive cultural connotation and span over a very wide price range, we are devoted to developing the best sounding audio equipment at competitive prices. We have developed over 400 products to date, ranging from CD players to speakers, all of which provide the same high-quality benchmark and attractive price to performance ratio. Our tube amplifiers have been particularly well-received within the audio community because of this commitment. We developed our first N6

Zhuhai Spark Electronic Equipment Co. Ltd

DAP back in 2013 and have devoted significant resources to Personal Audio products ever since.

Cayin pays attention to detail because we believe this is what it takes to reproduce music naturally. We employ different technologies for different products, but ultimately, we serve only one purpose: to move our audience with hi-fidelity. With Cayin, your music will never be the same again.

http://en.cayin.cn

DIGITAL SOURCES

- + DACs
- DAC/Preamps, DAC amps
- + CD/SACD/Blu-ray players/transports
- + Streamers, Servers, Wireless Bridges

ELECTRONICS

- + Preamplifiers, Preamp/DACs
- + Power Amplifiers
- Integrated Amplifiers.
- + Integrated Amp/DACs
- Headphone Amplifiers

LOUDSPEAKERS

+ Stand-Mount Monitors

- + Analogue Interconnects
- + Digital Interconnects
- + Loudspeaker Cables
- + Power Cables
- + Personal Audio Cables

PERSONAL AUDIO ELECTRONICS

- + Desktop Headphone Amplifiers
- + Portable Headphone Amplifiers
- + Portable Headphone Amp/DACs
- Portable Digital Audio Players
- + Accessories

CONTACT

Company Address:

P.O. Box 1948.

9 Lianfa Road,

Liangang Industrial Park,

Shuanglin Zone,

Zhuhai, Guangdong,

China

Company Tel:

+86 0756-3828711

SPOTLIGHT

CAYIN 9084D MK2

WHAT IS IT?

Mono tube power amplifier

PRICE

\$7,490 (pr) £6,890.00 (pr)

9084D MK2 is a major revamp of our 20 year old classic. It is designed to work with SL-6LS MK2 as a power amplifier. The mono amplifier adopts the legendary 300B (Full Music Gold Pin) and 845 (Shuguang Nature Sound) two stages single-end amplification design and delivers 28W Class A per channel (8Ω). Each channel also uses TUNG-SOL 6SL7 and 6SN7GTB tubes for voltage amplification and 22DE4 (RCA) for power rectification. The toroidal power transformer and multi-layer El Output transformer are designed and produced in-house. The audio circuit is hand-made and point-to-point wired with double-shield silver-plated OFC cable. BIAS adjustment (with meter) and humming adjustment are available conveniently to optimize the amplifier operation after tube rolling or interference. A soft-start circuit protects the vacuum tubes and transformer. Speaker output offers choice of 4Ω , 8Ω , and 16Ω impedance, allows you to choose your speaker with lots of flexibility.





Spark Electronic Equipment Co Ltd.

Hi-Fi+: As companies evolve they inevitably pass milestones that mark particular achievements or turning points in the company's growth. What are five or six key milestones on your company's evolutionary timeline?

Liang Bin: We just had our 25th Anniversary celebration a few months back. There are indeed several occasions that touch our soul. and we sure can call these our milestones. here are some of them:

The Company was established all the way back at 1993, we aimed at designing and building our own high fidelity audio product since day 1, and our first product was a FU29 based tube power amplifier Spark 560 released in 1994. We can still find this amplifier on second hand market occasionally and that tells us our products are built to last. Cavin never contended with single-product strategy, we started to expand our R&D

capability and in 1997, we released our first solid state amplifier 220C. In 2001, we produced our first CD player CD-12A and followed by a DAC quickly. This is an important moment because we completed our audio line up from source to amplifier. and mastered both digital and analogue product development expertise within the first 10 years of operation.

"WE MOVED INTO THE NEW **PLANT IN 2006, SETTLED** DOWN AND RAMPED UP OUR PRODUCTION QUICKLY"

We had tremendous growth in the next few years and started to look for a bigger facility. In 2005, we were supported by local government and leased a piece of land to build our new manufacturing plant. It is a purposively designed 4-storey 11,000 sq. meter facility with projected production capacity up to 10,000 desktop amplifiers per year. We moved into the new plant in 2006, settled down and ramped up our production quickly.

We had a major rebrand in 2010. We started to do business as Spark Audio originally, and marketed our product as Cavin to international customers. We went through a Corporate Identity exercise, adopted a new Visual Identity and traded under the Cayin brand worldwide from there on. After we gathered all our business under the Cayin brand, we received better recognition and business opportunities opened up shortly after that. Cayin ventured into personal audio in 2013 and launched a series of portable products. In 2014 we launched our first

portable Digital Audio Player N6. The player was extremely well-received and created a momentum in Cayin. Within four years we have launched six DAPs ranging from \$150 to S3000+.

We never stopped exploring in the past 25 vears and have accumulated the kind of expertise and track record that makes Cavin unique in the industry.

Hi-Fi+: What are four or five interesting 'factoids' about your company that you think the high-end audio community might want to know about?

Liang Bin: Not a lot, only a few we can think of. The commonest 'factoids' definitely is confusing Cayin as nothing more than a Tube Amplifier brand. When I run into these customers and tell them that Cayin, as of today, we produce Vacuum Tube and Solid State Amplifiers, CD players, DAC, portable DAP, portable headphone amplifiers, tube headphone amplifiers and desktop sound

systems and even speakers in our own factory floor, they probably think I am bluffing.

On the other hand. because we have two separated sales networks for traditional Hi-Fi and Personal Audio products and they seldom crossover, so some of the customers aren't aware of the other side of our product

mix. Especially when our Personal Audio customers read the review and describe Cayin as a "new comer to portable audio", they just assume we are a new brand, and the C5 portable headphone amplifier (2013) or N6 DAP (2014) are probably our earliest products. They aren't aware that Cavin manufactures a wide variety of Hi-Fi products and has been in this business for 25 years already. I think we need to do better along this line to clear the myth.

Last but not least, we have seen comments. on forums saying that Cayin is an entrylevel brand because we only make low-cost products. We can see where they come from because all our DAPs from 2015 to 2018 were priced at the sub-\$500 range, and even our desktop products are in the sub-\$1000 range. The other side of the story is our company believes in making music accessible to all sectors, so we devoted to developing best-sounding audio equipment within budget. In fact, our products span over a very wide price >





CAYIN A-845PRO

WHAT IS IT?

25th Anniversary DHT Tube Integrated Amplifier

Cayin will release a special commemorative product on every 5th or 10th anniversary, and A-845PRO is a TOTL integrated tube amplifier developed specifically for our 25th Anniversary. Cayin adopts a legendary Class A single-ended approach with a pair of 300B driver tube feeding a pair of 845 output tube. The A-845PRO delivered a big and lively sound, it retains the magic midrange of 300B with terrific transient and dynamic, and offers rich harmonic that you can immerse for long hours.

PRICE

\$8,999

A-845PRO is not a facelift version of CS-845A. We adopted a completely new design with better material and improved craftsmanship. Our engineers revised the circuitry and fine tuned the amplifier repeatedly for best possible performance. To fully explore its potential, we also worked with Full Music to custom develop a 845 vacuum tube that will solely be used in A-845PRO.

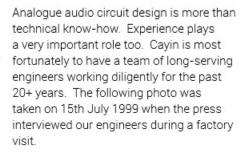
range and our flagship M-Series are well-received in Asian high-end audio industry.

Cayin flagship M-Series comprises of: M50CD tube CD player (£2,990), M11LS preamplifier (£7,899) M845D mono power amplifier (£16,790/pr)

Hi-Fi+: What are your firm's specific areas of product design expertise?

Liang Bin: While we cover a very wide range of products, the obvious common denominator is our analogue audio circuit development capability.

Over the years we have developed our preference on music reproduction and formulated our house sound. We are confident that we can achieve the sound signature we are aiming at through analogue audio circuit design, and it is not limited by specific platform. We can do that with vacuum tube, and we can also do that with transistor circuit.



From left to right we have Mr. Chen DeHai (joined 1994), he is currently our Chief Engineer and he oversees our amplifier products. His recent works include our flagship tube headphone amplifier HA-300 and our 25th Anniversary integrated amplifier A-845PRO. Next to him we have Mr Wu Xiandong (joined 1997) and he

> serves as Marketing Director in Cayin right now. The Press representative was in the middle, and then we have Mr. Ye Maosheng (joined 1995), he is the Lead Engineer of Cayin R&D Department and is responsible for all the portable products and the i-Series. Mr. Li Aimen (joined 1998) on the far right is our Assistant General Manager. It is amazing that all four engineers stayed at Cayin >





for their complete career, they represented 20 years of team work, over 80 years of audio engineering experience, and Cayin's leadership and core competence that can't be replicated elsewhere.

Hi-Fi+: Are there particular design or manufacturing techniques that help set your products apart from the competition? Could you briefly explain what some of those techniques are?

Liang Bin: One of the unique features of our high-end CD player and DAC is Timbre selection. Users can choose between Vacuum Tube and Solid State output at the touch of a button. The CDT-15a (2009) was our first digital product that introduced this feature and we have done this many time ever since. N8 is the first DAP that embraces this technology, and we expect some of our forth-coming digital products will carry on this tradition.

We believe the power transformer and output transformer are the critical success factor of tube amplifier design and production, so we always pay serious attention to this part. When we designed our new facility back in 2004, we included an in-house transformer plant in our 4-storey building and from there on, each and every power and output transformers of our tube amplifiers are designed and wound by our engineers

While we have used surface mounted technology in our portable and digital products, we stick with manual production for our tube amplifier and the audio circuit of our premium tube amplifier are constructed by point-to-point wiring.

Hi-Fi+: What do you consider to be your firm's 'landmark' products, "WE HAVE RECEIVED past or present, and what makes

Liang Bin: If I must name one product as our landmark, it will definitely be the A-88T from our A-series tube amplifier (domestic market only). This amplifier has been on sale for 15 years already, we had several rounds of refinement and face-lifting in between. As-of-today, we have sold over 50,000 units of A-88T already. We have received numerous awards and favourable reviews for the A-88T and this is definitely the best seller in our 25 year history. We produced a special limited edition A-88T at our 20th Anniversary and all 200 units were sold out within 6 months.

them landmarks?

The A-88TMK2 Monitor Version is our current premium version of A-88T. We paired it with CDT-15AMK2 to become an attractive mid-tier system and they are still a strong seller.

NUMEROUS AWARDS AND FAVOURABLE REVIEWS FOR THE A-88T"

The other evergreen best seller is our CDT-17A CD player. The original version was launched around 10 years ago and we updated it to CDT-17AMK2 in late 2014. This has become one of the Classics in China Hi-Fidelity Audio industry.

We can't complete Cayin's milestone product list without mentioning N6 Digital Audio Player (DAP). This is our icebreaking product to Personal Audio. The design was controversial when N6 was launched back in late 2014, but the perfect blending of transparent and warm sound signature was extremely well received. Although N6 has been discontinued quite a while already, the word of mouth has continued to spread and the N6 has remained one of the most sought after DAP in the second hand market. >

SPOTLIGHT

CAYIN CS-55A

WHAT IS IT?

PRICE

Tube Integrated Amplifier

\$2,199 £1990

This is Cayin's new generation tube integrated amplifier that comes with loads of features in a sweet sounding package. The amplifier is available in KT88 and EL34 version and users can interchange the output tubes any time. It offers up to 40 watts per channel (with KT88) in Class AB push pull amplification. The output stage can be switched between Triode and Ultra Linear mode. The audio circuit is hand-made with point-to-point wiring, and a soft-start circuit is in place to protect the vacuum tubes and transformer for extended product life.



The amplifier also comes with a 32-bit/384kHz USB DAC, allowing you to connect your computer to the CS-55A and stream music through it directly. The built-in phono stage and dedicated headphone output also make it extremely versatile. You can use it as the hub of your audio system.



"WE ALWAYS DESIGN

ENABLE INTERACTION

AND DISCUSSION"

Hi-Fi+: Suppose you overheard a group of audiophiles discussing your brand at a hi-fi show. What do you hope they would be saying about your company?

Company: I want to hear their genuine opinion and impression about our products because these are valuable raw material for our continual improvement. When they raise their concerns or tell us about the shortcomings of our products, they are sharing first-hand information that we can't obtain otherwise.

Quite often, I'll collect these feedback and come out with some ideas to realise them in our products. We think it is important to establish a

channel to link up our product development process with users. We must learn from them instead of detaching from the practical world.

Our producst were meant to be used by general users, not just engineers, so finding a way to collect user feedback and "translate" them. into product development requirement is

essential. In fact I value every opportunity to communicate with users, be it online or in person at shows and events. When I interact with users on our product or branding information, their mix and match experience or impression of their own gear, I am sharing their passion. Their knowledge and preference to Cayin products or as a brand in general is the best recognition of our effort, that's why we always design our display booth to enable interaction and discussion.

Hi-Fi+: If you are at liberty to say, what kinds of new **OUR DISPLAY BOOTH TO** products can we expect to see from your company in the next year or so? (We're not

> looking for you to reveal trade secrets, so feel free to answer in a deliberately general way, if you wish.)

Liang Bin: We are facing the problem of extended product development life cycle because Cayin insisted on innovation and technology advancement in our new products, >

SPOTLIGHT

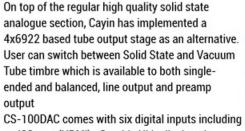
CAYIN CS-100DAC

WHAT IS IT?

Tube DAC with Preamplifier PRICE

\$4,999 £4,690.00

The CS-100DAC is a reference grade DAC. It features 2xES9038Pro and decode up to DSD512 and 32Bit/768kHz. Two extremely low-noise high-precision Femtosecond Crystal Oscillators are in place to ensure low jitter in all transmission and processing. It also incorporated a genuine audiophile grade pre-amp with up to 8V single-ended and 17V balanced output, user can connect the DAC to active speakers or power amplifiers directly without worry about compression and unlively playback.



an I2S port (HDMI). Graphic UI is displayed through a 3.95" full colour AMOLED screen. An IR remote control is supplied as standard.

The HA-1Amk2 is a re-design of our classic HA-1A which was one of the first headphone amplifiers listed on Stereophile Recommended component (2006-2011). It runs on single-ended amplification circuit with EL84EH as power tube, 12AU7 as driver tube and NOS 12DT5 as power regulation tube. It is one of the very few sub-\$1000 all-tube headphone amplifiers and its unique form factor and innovative circuit layout makes it ideal for desktop applications.

The HA-1AMK2 performs satisfactorily with most headphones available on the market. It offers five output impedance selections covering 8Ω -32 Ω , 33Ω -64 Ω , 65Ω -150 Ω , 151Ω -300 Ω and 301Ω -600 Ω . The two 6.35mm headphone outputs offers a choice of dynamic or soft presentation. We can offer all these at a very affordable price because the power and output transformer are in-house designed and wound with wide-band Z11 El-core.



CAYIN HA-1AMK2

WHAT IS IT? Tube Headphone Amplifier PRICE \$749.99 £599.00

and new technologies and ideas require a longer time to implement, test, and validate. For instance, we'll roll out the CS-100DAC and A-845PRO very soon. The former is our flagship digital analogue converter with built-in preamp, and the latter is our special limited edition product for 25th Anniversary celebration. These two products are undergoing extensive testing in our laboratory before we deliver them to market, both products have taken around two years to develop, a lot longer than we anticipated in our initial planning.

We have launched several headphone amplifiers in the past two years, including the recent exotic HA-300 flagship tube headphone amplifier that goes all the way to two-box design, Class A Single-ended Triode with external power supply. We are planning a less exotic but still professional grade tube headphone amplifier in 2019, it will be relatively affordable and we have selected KT88 as output tube for this new headphone amplifier.

We are also working on a very important portable product right now, it is based on Android 8.1 and we want to significantly improve the user experience in this attempt as this has been cited as our shortcoming

"THE HIGH-END AUDIO INDUSTRY SHOULD PLAY THE FACILITATOR ROLE SO THAT OUR USERS CAN ENJOY THEIR MUSIC THE WAY THEY WANTED IT WITH MINIMUM DISTRESS"

frequently. As usual, what goes under the hood will be the focus of Cayin new product. We are pushing the envelope to challenge the limitation of structural and portable analogue circuit at the same time. The functional concept is truly innovative, I promise you won't

find it anywhere right now. As of today, we have spent four months to test and validate the new product already and implemented over 100 changes in due course. This is a very difficult product for our R&D Department with massive workload, but we are confident that it will be a star product in our already impressive lineup. I won't go into detail but mark my word and you'll understand what I am referring to when you see the new product next year.

Hi-Fi+: Gazing into your figurative 'Crystal Ball', where do you see high-end audio headed in the next five years? If your predictions come to pass, how will your company respond?

Liang Bin: We notice two extremes in the current trend. On one end we observed a major come back on analogue media such as LP or even Reel-to-Reel, and on the other hand, we have seen more users resort to on-line service to acquire their Hi-res music. I think the high-end audio industry should play the facilitator role so that our users can enjoy their music the way they wanted it with minimum distress, after-all, the High Fidelity business is all about music enjoyment.

> I expect more manufacturers will integrate on-line capability to their product. Network ready, streaming, MQA for online

applications, NAS support are some of the application that will make their way into high-end audio product in next few years, and Cayin will also strengthen our support and application to these emerging technologies in premium audio market.

SPOTLIGHT



CAYIN HA-300

WHAT IS IT?

Direct Heated Triode Tube Headphone Amplifier

PRICE

\$3,999 £4,490.00

Cayin adopted a pragmatic Class A single-ended amplification with balanced output approach when we designed HA-300. The tube circuit is developed around the 300B Direct-Heated Triode tube and we use 6SN7 as the first stage of our push-pull circuit. We even design and build all the transformers and soft-start provide three sets of impedance matched headphone

outputs and one set of speaker output for HA-300. Since these output options are extracted from our output transformer directly, that explains why HA-300 is one of the most transparent tube headphone amplifier in the market.

HA-300 is a two-box design with a multi-stage tube regulated power supply driven by a custom-build toroidal power transformer. This is a special circuit to supply steady power independently to different gain stages, and we have used 4 pieces of NOS RCA 22DE4 Rectifier Tube to facilitate independent regulator for the voltage amplifier circuit.

Bluetooth has been around for a long time but its application to high-end audio was far from significant, the story is going to change rapidly when Qualcomm is pushing their aptX technologies to the next level and LDAC is gaining momentum. The inclusion of LDAC support into Android 8.1 system has a significant impact because high end audio hobbyists suddenly see their mobile phone as a wireless Hi-Res audio source. We believe these high quality Bluetooth applications will quickly find their way into portable devices and traditional HiFi products. They might become an alternative to RCA input when a lot of users are willing to trade a small portion of quality against the wireless convenience.

Material Science is also playing an important part in our industry especially on diaphragm applications. New material and coatings

"MATERIAL SCIENCE IS ALSO PLAYING AN IMPORTANT PART IN OUR INDUSTRY"



are emerging and traditional material has also been refined and put into new applications. These emerging materials have introduced new variables to the associated electronic equipment in terms of frequency bandwidth, current and power requirements, damping control, etc. We have to deploy a lot of resources to explore and validate the electronic and audio characteristic of these new materials and optimize our product to support these emerging materials satisfactorily.

Hi-Fi+: In order for prospective buyers to fully appreciate what your products are and can do, what specific things would you encourage them to listen for?

Liang Bin: On one hand, we don't interfere with customer's listening experience. We think this is a matter of personal preference, it can relate to choice of music, listening environment and subjective interpretation. That's why audio

> manufacturers have their house sound and informed customers will pick the brand that is closer to their preference.

On the other hand, instead of telling customers what to look for during their audition, we spend time to explain our concepts, why we are doing this, the pros and cons in our decision, and how we achieve this. These are areas that customers are not familiar with, and in our experience, enhancing their >



CAYIN I-SERIES DESKTOP PERSONAL SYSTEM

WHAT IS IT?

iDAP-6 Networked Digital Transport iDAC-6 Tube Buffered DAC iHA-6 Balanced Headphone Amplifier

PRICE

US\$799.99 TBC US\$699.99 £599.00 US\$699.99 £599 00

The Cayin i-Series is our lifestyle solution for modern music lovers. It offers minimalist design, flexible functions, premium quality, and a total solution to personal audio. The 3-piece suite can be used as a stacked system at 10"x10" footprint, or you can buy separately to fit into your existing system.

iDAP-6: Digital Transport playbacks Hi-Res music files from SD card, USB OTG and networked storage, supports Samba (NAS), DLNA, Airplay and Bluetooth. Versatile digital outputs: I2S, USB Audio, AES/EBU, coaxial (BNC and RCA), and optical.

iDAC-6: 2xAK4490 genuine balanced design DAC. Versatile tonal options with 4x6N16B tube buffer. Decode upto 32Bit/384kHz and DSD128 with DoP. Four digital inputs and XLR/RCA analogue outputs.

iHA-6: upto 7wpc fully balanced headphone amplifier, can handle the most demanding headphones with impressive detail and transparency. Innovative current and gain control. Accept XLR/RCA input with XLR-4, dual XLR-3, and 2x6.35mm headphones outputs.

SPOTLIGHT

CAYIN N5IIS

WHAT IS IT?

Android Based Digital Audio Player

PRICE

\$499.99 £429.00

The N5iiS is an Android based DAP with outstanding digital audio capability and superb audio performance in an extremely compact form. It is designed around the ESS9018K2m and can decode upto DSD256 and 32Bit/384kHz. It employs separated amplification circuit for 3.5mm single-ended and 2.5mm balanced headphone output and they are optimized at their best independently. N5iiS is highly expandable with comprehensive choice of line out and digital interface. User can install applications from Google Play and enjoy online and offline streaming after connected to WiFI. The 64GB internal memory can hold thousands of songs for offline Tidal and Spotify playlist.



Cayin developed an Audio Priority mode for users looking for supreme audio performance by turning off all wireless and third party applications and optimize the Android system to bare-bone audio-related functions only. The player is solidly built by CNC stainless steel chassis, leather case is supplied as standard.

CAYIN N8

WHAT IS IT?

Reference Digital Audio Player

PRICE

\$3,299 £2,599.00

The N8 is our first price-noobject DAP with a proud mission

to deliver the best possible audio to portable users. The N8 DAP features 2x AK4497EQ and can decode up to DSD256 and 32Bit/384kHz with stellar dynamic range and resolution. This is the first DAP that employs Triode vacuum tube (KORG Nutube) in single-ended amplification. Fully balanced headphone and line outputs out are also available from its 4.4mm Pentaconn

connector. The High Impedance High Output mode is also a unique feature, with up to 750mW@32ohm, the N8 is one of the most power DAPs on market. N8 is highly expandable with three digital outputs (I2S, USB Audio, Coaxial) and can serve as USB-DAC. It can also function as wireless DAC through LDAC Bluetooth, allowing users to enjoy online streaming conveniently. You can remote control the player through a mobile phone. Leather protective case and comprehensive cable/ adapter package is supplied as standard.

understanding through sincere and profound exchanges will likely develop their appreciation without undermining their personal preference.

Hi-Fi+: What are the two or three most important pieces of advice you would give to enthusiasts looking either to build new audio systems or improve existing ones?

Liang Bin: This is a very diversified and interactive topic that we find it difficult to generalize. We have run into similar discussion frequently and when we have the luxury to sit down and discuss in detail, the final recommendation will become personal and non-standardized

However, there are two interesting points that keep coming back. The first issue is to improve the quality of the power supply to the sound system. Cayin believes a clean and stable power supply is the root of good audio performance. That's why we always pay serious attention to the power supply module of our product. Even with price conscious products such as desktop player iDAP-6 (retail at US\$799), we have squeezed a linear power supply with toroidal transformer into the small box. Unfortunately the expensive power supply circuit in your gears is not going to perform satisfactory if the power supply in your house is noisy and unstable, so we always recommend users improve the household power supply or invest in appropriate power conditioner when needed.

The second issue is the sequence of selection when someone wants to build a >



sound system from scratch. I always suggest they pick the right speaker and headphone as early as possible. There is no such thing as the best speaker or best headphone. That's why we use the word "right" in the context of meeting personal preference and practical constraints. Expensive gear is not always better when it doesn't agree with our personal

preference; a big floor-standing speaker is unlikely to perform better than a decent bookshelf speaker in a small room, a closed back headphone will perform better in a noisy environment even if they have limitations on certain audio attributes. Once we selected our transducer, we can select the appropriate amplifier and then the source equipment.

SPOTLIGHT



CAYIN SL-6LS MK2

SL-6LS MK2 is a major revamp of our 20 years old classic. It is designed to work with 9084D MK2 as a preamplifier. It employs 4x12AU7EH (Electro-Harmonix) for Class A linear amplifier, and 2x22DE4 (RCA) for power rectification. The circuit is designed with 15dB gain to enhance its compatibility with modern sources and amplifiers.

The El Power transformer is designed and produced in-house to meet our strictest

WHAT IS IT? PRICE

Tube Preamplifier \$2,490 £2,390.00

requirements. The audio circuit is hand-made and point-to-point wired with double-shield silverplated OFC cable. A soft-start circuit is in placed to protect the vacuum tubes and transformer for extended product life. Carefully selected premium components such as US Multicap Coupling Capacitors and Japan TAKMAN carbon film resistor are used to deliver optimized audio performance. Four sets of RCA inputs and two sets of RCA outputs are located at the back panel, and an IR remote control is supplied as standard.





Reference Direct Heated Triode Tube Headphone Amplifier

- · Class A single-end amplification
- · 8w + 8W speaker output
- · Point-to-Point wiring
- · Auto-biasing
- Designed around 300B DHT tube
 Extensive mute protection to ensure quiet operation
 - · Two boxes design with outboard tube regulated power supply
 - · In-house designed and Winded Dual Output Transformers
 - > Optimized performance from 3 sets of impedance matched outputs
 - > Direct output to 4-pin XLR (BAL) and 6.35 mm (SE) headphone

Through the HA-300, the music breathes naturally and sounds harmonically rich and full of delicate, unforced details, but with an uncanny quality of being 'illuminated' from within. (Chris Martens, HiFi+, 161)

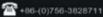
















CAYIN HA-300

REVIEW FROM: ULTIMATE HEADPHONE GUIDE - SUMMER 2018

Founded in 1993, Cayin is a performance minded audio manufacturer from China whose reputation was initially built on building affordable, high performance tube amplification components. While the firm has since branched out to build many solid-state products, including portable headphone amps, amp/DACs, digital audio players, DACs, and more, Cayin's commitment to tube-powered amplification runs deep. When it came time to launch a statement class headphone amplifier, then, Cayin chose a class A, single-ended triode design whose roots go back over 20 years. Cayin's HA-300 (\$4,000) is a beautifully made, two-chassis, tube-powered headphone amplifier. The amplifier relies upon a pair of 6SN7 driver tubes feeding 300B output tubes, which are legendary in audiophile circles; the 300B's

in turn drive a pair of proprietary Cayinmanufactured output transformers, which support both single-ended and balanced headphone outputs. These special output transformers provide, says Cavin, "three sets of impedance matched outputs for a very wide range of headphone impedance loading." Moreover, the HA-300 is capable of serving as an 8Wpc stereo integrated amplifier suitable for driving high sensitivity loudspeakers.

The larger HA-300 chassis houses the main amplifier, while the smaller chassis houses the power supply; a beefy 'umbilical cable' connects one to the other. Even the outboard power supply is tube-driven, with four NOS RCA 22DE4 rectifier tubes each feeding independent regulators for different gain stages within the voltage amplifier >

CAYIN HA-300 REVIEW FROM: ULTIMATE HEADPHONE GUIDE - SUMMER 2018

circuit. Completing the picture is a massive custom-made toroidal power transformer. Let me come right out and say it: The HA-300 is drop dead gorgeous. Both chassis feature nearly 0.5-inch thick milled aluminum faceplates with inset gold Cavin logos, while the chassis enclosures and transformer housings are done in a lustrous metallic grey lacquer finish. Capping the tops of the transformers are thick milled aluminum cover plates engraved with Cavin logos, while the tube sections of both the amplifier and the power supply come with handsome, removable, black wire-frame tube cages.

The real magic of the HA-300, however, has far more to do with its sound than its looks

Llistened to the HA-300 with three of the finest planar magnetic

headphones I had one hand: the HiFiMAN Susvara, the Final D8000, and the Abyss AB-1266 Phi edition. The HA-300 proved to have enough output to do justice to all three top-tier headphones, even the extremely difficult- to-drive Susvara. Through each of these headphones, the HA-300 delivered a big, highly expressive, and dynamically robust sound-one that in every case produced broad, deep soundstages with wonderfully precise placement of individual sounds within those stages. Stated simply, the HA-300 vividly shows exactly how individual instruments and voices sound, but also shows from whence those sounds are coming

The amp delivers a slightly warmer than neutral sound coupled with excellent transient speeds, terrific dynamic agility, and disarmingly great rendition of lowlevel details in the music. In fact, on several occasions transient sounds seemed so real and convincing that I pulled the headphones from my head to look for the sound sources, only to realize with chagrin, "Oh, that sound was actually in the recording-not outside in my listening room." Listen to Melody Gardot's infectious laughter at the very end of "Who Will Comfort Me" from Worrisome Heart [Verve, 16/44.1] to hear what I mean.

> The Cavin's sound is much different from the almost hyper-focused, hypercontrolled, and hyperanalytical sound of some of today's better solid-state amps. Instead, through the HA-300, the music breathes

naturally and sounds harmonically rich and full of delicate, unforced details, but with an uncanny quality of being "illuminated" from within (a hallmark of fine 300B designs). This quality, for example, beautifully underscored the emotive power of Joan Armatrading's voice on "Merchant of Love" from What's Inside [Savoy Jazz, 16/44.1]. Cavin's HA-300 is a wonderful, top-tier headphone amplifier that not only offers compelling technical strengths, butmore importantly-offers musical ones that constantly show how vital and alive recorded music truly can be.

Chris Martens

"THROUGH EACH OF

THESE HEADPHONES.

THE HA-300 DELIVERED A

BIG, HIGHLY EXPRESSIVE,

AND DYNAMICALLY

ROBUST SOUND"

CAYIN HA-300 REVIEW FROM: ULTIMATE HEADPHONE GUIDE - SUMMER 2018

CAYIN HA-300 TECHNICAL SPECIFICATIONS

TYPE: High performance, tube powered, balanced headphone amplifier/integrated amplifier

TUBE COMPLEMENT:

POWER SUPPLY: four NOS RCA 22DE4 rectifier tubes

AMPLIFIER: Two 6SN7 driver tubes, two 300B power TUBES INPUTS: One stereo single-ended analogue input (via RCA jacks), one stereo balanced input (via XLR jacks).

OUTPUTS:

INTEGRATED AMPLIFIER: One stereo set of

loudspeaker binding posts

HEADPHONE AMPLIFIER: One balanced stereo headphone output via a 4-pin XLR jack, one singleended stereo headphone output via a 6.35mm headphone

JACK CONTROLS: Speakers/headphones output switch, XLR/RCA input switch, L/M/H headphone impedance switch, STD (single- ended)/BAL headphone output switch, illuminated on/off switch, illuminated L/R VU meters, stepped volume control Frequency

RESPONSE:

INTEGRATED AMPLIFIER: 10Hz-60kHz ± 3dB HEADPHONE AMPLIFIER: 10Hz-50kHz ± 3dB DISTORTION: < 1% at rated output at 1kHz

OUTPUT POWER:

INTEGRATED AMPLIFIER: 8Wpc (Class A)

HEADPHONE AMPLIFIER:

Low impedance (8-64 Ohms):

SINGLE ENDED: 1100mW/channel BALANCED: 1800mW/channel Medium impedance (65-250 Ohms): SINGLE ENDED: 2400mW/channel BALANCED: 2200mW/channel High impedance (251-600 Ohms): SINGLE ENDED: 5000mW/channel

BALANCED: 3700mW/channel

ACCESSORIES: Main amplifier chassis with tubes

and protective tube cage, power supply chassis with tubes and protective tube cage, AC power cord, "umbilical cord" to connect the power supply to the main chassis, Chinese language user guide, and linen gloves for handling tubes. Dimensions (H×W×D):

POWER SUPPLY: 210 × 159 × 345mm AMPLIFIER: 210 × 286 × 368mm

WEIGHT:

POWER SUPPLY: 10kg AMPLIFIER: 19kg

PRICE: \$3,999 US; £UK price not yet announced

MANUFACTURER INFORMATION

Cayin

Zhuhai Spark Electronics Equipment Co., Ltd. Zhuhai City, Guandong, China Postcode 519045

+86 (0)756-3828711 URL: www.cayin.cn

Summary

Sonic character: Fundamentally neutral, but subtly shaded toward organic warmth and harmonic richness.



- . The sound: powerful, revealing, nuanced, and musical.
- Impeccable build quality plus handsome good looks.
- · A 'statement-class' amplifier at a reasonable price, given the quality on offer.

- No remote control.
- Weight: Be careful when moving this two-chassis beast.



A Dynamic Trio to **Fit Your Every Needs**

iDAC-6 2xAK44909 genuine balanced design DAC. Versatile tonal control to match with different headphones or speakers. Decode upto 32Bit/384kHz and DSD128. Support DoP. 4 digital inputs. XLR and RCA output with Pre-out mode. 4x 6N16B tube buffer.

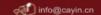
iDAP-6 Digital Transport playback Hi-Res music files from SD card, USB OTG (2.5" HDD), wireless and networked storage. Support Samba (NAS), DLNA, Airplay and Bluetooth. Digital outputs: USB Audio, AES/EBU, Coaxial (BNC/RCA), Optical, and HDMI (I2S).

Upto 7wpc fully balanced headphone amplifier, designed to drive the most demanding headphones with impressive detail and transparency. Innovative current and gain control, XLR-4, 2 x XLR-3, and 2 x 6.35mm headphones outputs. XLR and RCA inputs.



If you listened to these components without knowing their identities or prices, my guess is that you might take them to be components priced north of, say, \$4,000-\$5,000, judging purely by the sound quality on offer. (Chris Martens, HiFi+, 164)





A subsidiary of ZHUHAI SPARK ELECTRONIC EQUIPMENT CO., LTD





ULTIMATE **HEADPHONE GUIDE**



LIMITED STOCK AVAILABLE

Each issue RRP £9.95 - Discounted price £7 + P&P Special Offer Issue 1 & 2 for £12 + P&P





BUY IT NOW!! www.hifiplusstore.com

INDEX

- Foreward from the publisher

Directory A-C Accessories. Analogue Sources Cables

- Directory D-L Digital Sources, Electronics. Loudspeakers
- Directory P-Z Personal Áudio, Personal Audio Electronics, Power Products
- Allnic Audio
- AURALIC
- Brian & Trevors
- Burmester Audiosysteme GmbH
- Cardas Audio
- Cayin
- CH Precision
- Critical Mass Systems
- Crystal Cable
- ELAC
- Engström & Engström
- Ensemble
- Gold Note

- Graham Audio
- Grand Prix Audio
- Innuos
- Lavardin Technologies
- Lindemann Audio
- Linn
- Merging Technologies
- Monitor Audio
- Neat Acoustics
- Nordost Corporation
- ProAc
- Purist Audio Design
- Roon Labs
- Shunyata Research
- Siltech
- SME Ltd
- Warwick Acoustics
- WBT Industrie GmbH