Power amplifier

Ayon Audio SCORPIO MONO

Manufacturer: **AYON AUDIO**

Price (when reviewed): 8900 PLN/pc

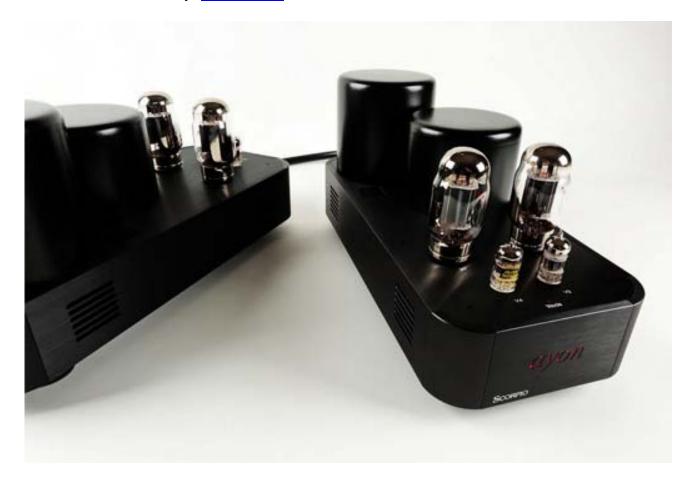
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MADE IN AUSTRIA

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know Gerhard Hirt pretty well, I think I can call him my friend. He runs his company, Ayon Audio as a top class manager should but at the same time he is an audiophile and music lover too with a large collection of records, CDs and music files. He is so creative and full of ideas all the time that he can't help himself and he simply has to present an improved version of one of the products every now and then. He simply can't wait to share each of his achievements with the customers. Audio tycoons rather try to achieve at least certain level of profit from current products before introducing new ones. That's why one can see brands such as Accuphase, Mark Levinson, Audio Research and others to release new products or versions every 2-3 years. But Gerhard as a truly passionate man is sort of impatient and simply has to deliver all improvements to customers as soon as possible.



I think that was the genesis of the first ever Ayon SACD player and the new files player that will premiere in November during Audio Video Show 2016 in Warsaw. Same goes for Scorpio monoblocks. These are sort of a "spin off" of an integrated amplifier carrying the same name, which we've known since

I have a vague feeling that somehow, subconsciously engineers responsible for the Scorpio Black had to remember this sound signature It is not just a copy, but a new device inspired but some classics and in an interesting way too. The device delivers a very rich, dense sound. Everything is included - a 3D body and detail and space, accompanied by a focus on a large volume, although there is no doubt that the body of each phantom image is the most important element of the presentation. The instruments are so large in size, will never disappear in the background, they are presented with utmost attention to details. It is, I believe, a result of certain modification of the sound, ie. an emphasis in medium bass and lower midrange area. That's exactly a type of sound modification that one usually calls a "physiological" or "friendly" or simply "enjoyable".

I listened to some albums taking the above discovery into consideration and established that these recordings had with Scorpio their own, distinct sound characteristic. So when I listened to Bach cantatas performed by Bernarda Fink, her voice, but also the trumpets, sounded slightly leaner, had tonal balance gently shifted up, but they were not made artificially richer, heavier due to amplifier's emphasis. At the same time one clearly hear this features of the recording and accept it as something natural. And that's because Scorpio are "cruel" for imperfect recordings. They tend to "cover up" such shortcomings either with color saturation, or the volume of the sound, but should not emphasis weaknesses of any recording.

Such, ie., warm sound with somewhat naturally soft attack usually results with a preference of a particular type of recordings, that sound best (please forget about the so-called "neutrality", it does

the last year. I think they are supposed to show what this particular design and the KT88 tubes are truly capable of when one is ready to spend bit more and free the power amplifier from difficult duties by leaving the preamplifier section out and separating right and left channel. Thus one reduces a crosstalk between channels, improves power supply capacity (because now there are two of them) and lowers vibration level thus reducing microphonics of valves.

Scorpio Mono

The amplifier does not cost much - for this type of product - and does not take up much space, because these monoblocks are surprisingly small. It's a real relief after other huge and heavy beast that seem to be a specialty of Ayon Audio. Manufacturer used here two beam tetrodes KT88 working in push-pull configuration in A class. These are readily available valves in a wide range of brands, both of the current production and NOS ones. So this is an amplifier for the "people", a "volksamp" if you will. Tubes are pre-selected, measured and paired. One can find specifications of each tube, including signal ones, on their boxes. That's a good practice for any tube device.

The amplifier has been designed to operate within an optimum gain curve for tubes, which means that they are better utilized than usually. The problem is the higher the temperature and the need for constant monitoring of their work. Especially for the latter purpose a few years ago Gerhard designed, herewith utilized its latest version, an automatic calibration system called Intelligent Auto-Fixed-Bias (AFB). As highlighted in the manual, it is neither a system of semi-automatic adjustment, nor fixed bias system.

not exist in real life, there are only successive approximations to it). I wouldn't really say that some particular music genre or type suits these amps best, and that one can not listen to other types, even though the above description usually ends with such conclusion. Ayon is too powerful, too fast, too dynamic for such limitation of repertoire to be true. Warm? - Yes, but not muddy. Rolled off treble? - I think it's safe to say, but the sound doesn't lack freshness and is surely not dark.



We are talking about a very well tonally balanced presentation, that is perceived as particularly rich, complete. All events have their own importance and purpose, which I have heard before with some amplifiers of a completely different design, such as elinsAudio manufacture Concerto and also with Ayre AX-5

Twenty. Comparing this performance with more precise sounding devices, eg. next Polish integrated, Abyssound ASA-1600, one can realize that Ayon stresses the importance of all instruments, combining all sound sources together at the expense of selectivity.

When on a wonderful album, *Il Canto D'Orfeo*, that was sold in the main building of the National Museum in

Preparation of the amplifier to operate is pretty straight forward, but it does not hurt to ask your distributor or dealer to do that for you. Once the system is calibrated it will work perfectly operating in optimal conditions. One could, of course, prepare amplifier even easier to use, with multiple protective circuits but that would cause an inferior sound quality.

One can indeed, within certain limits, change amplifiers sound depending on one's preference and loudspeakers one uses. For example, by choosing the mode tubes operate in - as a pentode or triode. To do this simply press the small button on the back of the amplifier. However, it should be done ONLY when the device is switched off! This is the case, where one definitely should read the manual or listen carefully to the advice of a party who sold him this device.

In the pentode mode amplifier is capable of delivering 45W output, and while operating in triode mode a 25W (30W) output – that's what manufacturer specified. I've included the second value in two versions, because I found two different values on the website and in the manual. Please notice how the number is given at distortion of 5%. Let me remind you that for tube amplifiers, it is assumed that power is given usually at 3% (for transistor amplifiers is 1%). So when comparing values between Scorpio Mono and other amplifiers one should take that into consideration.

This, of course, are mono power amplifiers, so there is a separate amplifier for each channel, each amplifier features a separate power cable. The devices are, however, extremely small and sleek; they actually occupy the same space as a stereo amplifier.

Warsaw (I bought it when visiting a very nice exhibition Brescia. Renaissance in Northern Italy) including works related to the myth of Orpheus I heard theorbo, it sounded pretty clear, warm and more "present" than in reality. The same is true when harpsichord or organ start to play. When one listens to these instruments during the concert, even when sitting close to them one identifies them mainly through the transient attack, more powerful plucks. The recording, of course, "highlights" them, but Ayon goes even a step further by aligning them eg. with vocals. Baroque music, vocal (Smolik!), Electronic (Jarre), jazz (Namysłowski), ie. every genre with a clear central point, a leader - all these discs sounded fabulously.

Triode, my triode!

Such type of presentation is usually associated with triode amplifiers. The Ayon delivers it right away, but in pentode mode. It is clear that the top triode amps are the single-ended ones (SET or Parallel SE), but everything below their price and quality is not so obvious. Because Ayon for example, when playing in triode mode delivers less clear, less tangible instruments. The sound is obviously more relaxed, because eg. classic albums in terms of sound character are more like a live performance - one "sees" it from a bigger distance, and the edges are subjected to diffusion. On the other hand sound is not resolving enough to deliver performance even close to live-like dynamics and resolution. That's why every time I returned to pentode mode as the one that better reflects full ability of Scorpio Mono, which gives sound a stronger character and differentiates it in a better way.

Summary

TESTING METHODOLO

The Scorpio Mono amps were tested with Ayon Audio Spheris III preamplifier, Soulution 710 power amplifier and Harbeth M40.1 loudspeakers. I used Acoustic Revive RCA1.0 Triple-C FM interconnect between the CD player and preamplifier and preamplifier and power amplifiers and Acoustic Revive SPC2.5 Triple-C FM speakers cable. The speakers were plugged into 4-ohm output.

I used <u>Oyaide Tunami GPX-Re v2</u> power cables plugged into <u>KBL Sound</u>

<u>Reference Power Distributor</u>. The latter was plugged into the wall socket using <u>KBL Sound Himalaya</u> power chord.

SOUND

Recordings used for the test (a selection)

- Il Canto D'Orfeo, wyk. Il Trionfo del Tempo, Et'Cetera | Klara KTC 4030, CD (2009)
- Brian Eno, The Ship, Warp Records | Beat Records BRC-505CE, SHM-CD (2015)
- Depeche Mode, *Ultra*, Mute/Sony Music Labels SICP-30543, Bluspec CD2 (2007/2014)
- Dire Straits, Brothers in Arms, Vertigo/Mobile Fidelity Labs UDSACD 2099, "Original Master Recording, Special Limited Edition | No. 1808", SACD/CD (1985/2013)
- Jean-Michel Jarre, Electronica Project. Vol. 1 Time Machine, Columbia | Sony Music Entertainment 88875108352, Box No. 465/1000, CD + 2 x 180 g LP + FLAC 24/96 (2015);

I have not listened to Ayon amplifiers for quite some time, dealing with thousands of other products. It's time to catch up, because Gerhard's works are always interesting. Soon, we shall take a closer look at new Ayon players (SACD and music files), both – in reviews and during the Krakow Sonic Society meeting. For the Audio Video Show 2016 we are also planning a joint presentation of Polish Jazz recordings, hosted by Jacek Gawłowski.

The Scorpio mono amplifiers very nicely fit the present Ayon's sound philosophy. It's an incredibly rich, dense performance of a warm character. Its dynamics is very high and powerful, low bass extremely well controlled. Even the Harbeth's 30cm woofers performed accordingly, realizing Gerhard's ideas about bass extension and punch. There is a proper momentum, fullness, and full control. What one gets with Ayon's more expensive amplifiers, especially triode ones, is a better resolution and selectivity. But with Scorpio one gets a sweet - both in terms of appearance and sound – compact monoblocks that can work easily with a wide range of loudspeakers, including those with a more difficult impedance curve. And the performance is sooooo enjoyable!

DESIGN

Even in the dark it is clear that Scorpio Black is a product of Ayon Audio. The distinctive shape of the housings made of aluminum elements and the illuminated red logo (this is why in the dark is even easier to recognize this brand's products...) are unchanged for years. A novelty is the size of these particular devices – they are significantly smaller than any previous models, and it is because there is only one pair of power

- Johann Sebastian Bach, Solo Cantatas BWV 35, 169, 170, wyk. Bernarda Fink, Freiburg Baroque Orchestra, Harmonia Mundi HMG 502016, CD (2009/2016)
- Michał Wróblewski Trio, City Album, Elite Records 11529024, CD (2014)
- Owlle, *France*, Sony Music Entertainment France, "Promotional Copy", CD-R (2014)
- Smolik/Kev Fox, Smolik/Kev Fox, Kayax | Agora 92781141, CD (2015)
- Zbigniew Namysłowski Modern Jazz Quartet, *Lola*,
 Decca/Universal Music Japan UCCM-9173, "From Europe With Jazz. Vol. 2", CD (1964/2003)

Japanese issues available at

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Tube amplifiers are grateful object of experiments. Trials with various tubes power and input one - anti-vibration elements (valves are prone to microphonics) and some others make it possible to adjust the sound to your taste and system. There are, of course, certain limits of those changes, even if you occasionally hear some people claiming that tube rolling resulted in "a totally different amplifier." At first one might observe particularly spectacular changes, but after some time it turns out that they are only slight modifications. It is not possible to achieve anything more because of the limitations of an electrical system, used parts, materials and the way they are put together.

The same can be, in my opinion, said about the power tubes operating modes - triode and pentode. These are, of course, the same tubes - pentodes or, in this case, beam tetrode, which can however be used in two ways. Listening to Ayon while

tubes instead of two or even three of them. Gerhard decided to use KT88 beaming tetrodes, or to be exact the KT88sx, custom made for Ayon by a Chinese company Shuguang. The 12AU7 (unmarked) and 12AX7EH Russian Electro are employed as drivers and phase inverters.

The power tubes work in class A in push-pull configuration, and one can choose the mode they work in - a classic pentode or triode. To change the mode one uses a button placed on the rear panel. Until recently, all amplifiers featured a toggle switch placed on top cover next to tubes. Ayon changed that for Scorpio for some reasons – either it didn't fit stylistically, or there was something else. From what I heard from some people, the Ayon devices are seen by some as an not reliable. I've been using their preamplifier for many, many years and nothing ever happened to it. The amplifiers used in accordance with instructions also perform very well for many years. Yet, they are not immune to stupidity.

For years Gerhard has been developing his proprietary auto-bias system that allows tubes to always work in optimal conditions. Its calibration, however, was initially quite complicated, so many impatient users ruined their tubes and blamed amplifiers for that. And even after the procedure was simplified, nothing changed, except the direct cause of damage. Nowadays the tubes are usually damaged by the irresponsible use of the triode/pentode switch. And all one has to do to avoid that is to read the manual, which clearly states: DO NOT do this when the amplifier is switched on. First, turn off the power, wait 2 minutes to make a change and turn the power back on. And one does that - back

comparing its sound in either mode, I could always say that it was Scorpio, not two different devices. The basics sound qualities are in fact the same for 'triode' and 'pentode' mode. This does not mean, of course, that the sound is exactly the same, but the differences are in fact rather just slight modifications of the same sonic signature and not something totally different. To be honest I preferred the pentode mode and so I shall describe how these amps sound like when using it. At the end I will present the main differences between both modes and how they affect the perception of music.

ayon ayon

The sound signature of this amplifier is quite similar to the Crossfire EVO, which I reviewed once for the "Enjoy The Music" magazine in terms of tonal balance, the setting of priorities, including how the objects in front of a listener are presented. Sound is warm, full, dense. Already these three words situate it in a slightly different place than amplifiers that manufacturer offered a few years ago. Older models were about being quick, transparent and delivering pure power. The new generation, perhaps in part due to the precise bias control of power tubes presents more traditional tube-ish sound, especially in the models

to the description of this design – using a mechanical switch on the bottom panel.



Behind the tubes there are two large housings with transformers inside — mains and output, cast in a special resin, which dampens vibrations and shields against RF and EM radiation. Each stage has a separate power supply and DC filament for tubes is regulated. The circuit includes choke for filtering power for tubes and a soft start system and inrush current limiting. The power on cycle takes approx. 1 minute, during which the illuminated logo on the front keeps flashing.

On the back there is a single solid RCA input and three speaker terminals - separate one for 4 and 8 Ω loudspeakers (ground terminal is common for both). There is also a toggle switch that cuts off the signal's ground from chassis' ground. This might come handy if there is hum coming from speakers.

It's a very solid device with the classic and characteristic Ayon design and appearance. that still use KT88, but adding to that good resolution and dynamics.

This performance reminded me of other classic amplifiers using these tubes, such as: McIntosh MC275 and QUAD II.

Specifications (according to manufacturer)

Class of operation: Triode or Pentode

mode, Class-A

Power tubes: $2 \times KT88$ Load impedance: $8/4\Omega$

Frequency response: 15Hz – 40kHz Output power (triode/pentode):

25W/45W

Input impedance (1kHz): $100k\Omega$ Input sensitivity (full power): 700mV

S/N (full power): 98dB

NFB: 0 dB Input: RCA

Dimensions (WxDxH): 200 x 440 x

230mm

Weight: 15kg

Galeria



















