

*Auris is one of the latest Ayon newcomers. First announcements were made mid-last year and the device hit the market in 3<sup>rd</sup> quarter of 2014. Auris is one of four pre-amps currently manufactured by Austrian workshop. Apart from this preamplifier you can find basic Eris as well as two models in higher price range: Polaris III and Spheris III.*

## The taste of tube

### Ayon Auris

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Modular type of design distinguishes Auris from the rest of Ayon pre-amps. You can order it custom made to your current needs and wealth. But in case of any changes you just send it back to the manufacturer for upgrade. Of course that would cost you a bit more than better version at once, simple as that. In case of upgrade owner will pay not only for the parts but also costs of labor and transport, there and back. Good news is Ayon sets no limits to your demands – you can buy the basic configuration and order the highest possible upgrade. All inside the warranty and certainty that the job was done perfectly and by proper crew.

This kind of service is a huge value once you're aware of very special off-the-record treats from Mr. Gerhard Hirt. Were there any general upgrades within the whole product line in the meantime? No problem, your device will be equipped in those as well. The owner might not be aware but there will be no additional costs on the invoice - instead of that your device performs much better as expected. If you have this sort of impression, it's not delusion but just a result of all extra upgrades.

In its basic version Auris' internal circuits are unsymmetrical, built of very good (not state-of-the-art though) quality components. Further steps of upgrade mean equipping it in phonostage ready for MM and MC cartridges. You can order the pre-amp upgraded to balanced version later and – as we can take a look inside – it means real symmetrical circuit, not only adding XLR terminals. And the final stage would be upgrade to Signature specs, including i.e. very costly coupling capacitors. Of course you can skip various stages of upgrade and order the one you're interested in. Maximum upgrade for Auris consists of all the treats. At first glance to the front panel there is no difference to the basic version but once you turn the device back to front, you'll see XLRs and Signature sticker.

All versions of the pre-amp are remote controlled. The cheapest Auris – unbalanced and unphonostaged costs PLN 26 900. Signature upgrade will take another PLN 3 790. The version including MM/MC pre-amp is PLN 31 690. Auris Balanced starts at PLN 39 900, further up the stairs we've got Balanced Phono (PLN 44 690) and Balanced Signature (PLN 47 390). And we're testing the last one of this list.

#### **Build**

The new Ayon pre-amp keeps on the design known of another Austrian devices. The chassis is made of round-shaped side panels of brushed aluminum, put together into one rigid piece by screws. It's available in black only, brushed surfaces all around. About a decade ago the manufacturer offered silver finish but it was ceased in time. Silver got unfashionable and black keeps up very strong, showing that nothing's better than classic design. Thanks to that worldwide distributors as well as manufacturer have clearly put trouble off their shoulders – keeping double stock of chassis spare parts and ready-to-go devices means usually a higher risk as it generates higher costs and not necessary pays off better.

The front panel is decorated by subtle silver details – chromed volume control / source selector knobs and laser-machined inscriptions. Red dot-matrix display shows sound source, volume level and signal phase in very clear way and cartridge load in case of MC. As soon as "Muting" blinks on display, the device has been muted. You can also adjust balance. The display isn't disturbing, even as it lights up in brightest setting, but if you feel uncomfortable with it, you can easily dim it or turn off.

We can see some chromed details on the top of chassis as well. These are cooling outlets – two of them dissipate heat directly of tubes underneath. The remaining two are there mainly for symmetry reasons although they can help with cooling too. We can see some outlets at the sides. Inside there are eight tubes – good heat dissipation is necessary for optimum performance and longer lifespan. It's not recommended to put Auris inside the closed rack as we should leave some space around the device. The remote is all metal and very handy. You'd better not lose it because it gives you access to

additional options. Once you grip, it gives you real high quality feeling, matching perfectly with to pre-amp's price range.

Main power switch is mounted underneath chassis, on the left front side. It's a standard mechanical on/off button giving you possibility to cut off the power completely. No chance for standby here. Once we move to the back panel, we can see very good choice of connectors. Version tested here gives you choice of two XLR inputs, three RCAs and phono MM/MC. If pre-amp hadn't been equipped in phono module, we would have had one more RCA line in.

Line 4 gives you pass-through option for home theatre system. Once you're interested in integration of your stereo and multichannel systems, we can connect processor or AV receiver's pre-out into these sockets. Home Theatre function is activated by bi-positional switch on the back – factory set to Line 4. User can switch to HT after hooking up external processor, allowing internal signal to avoid pre-amps circuits and go directly to the outputs.

Speaking of outputs, there are three here – two RCAs and one XLR. By switching we decide to use one type of both. The very last switch means to be used for gain selection – factory setting is "Low" and this will offer the best dynamic reproduction. In extreme cases we will have to use "High" – it boosts gain 6 dB up, but the sound becomes less subtle.

Power socket is standard IEC. The LED aside shows the proper polarity and it shouldn't be lit up. Once it is, we have to reverse the plug in wall socket or plug board. Quality of components and parts is out of question. RCA sockets are gold plated and PTFE insulated. They are placed wide enough to receive very bulky plugs. Aluminum panels are very thick, make the device look exclusive and provide proper external resonance reduction. The only thing we have to care of would be cleaning – best way would be to use soft cloth and not move the pre-amp too often because every single fingerprint is visible on anodized and brushed surfaces.

### **Interior**

As we take a look inside, everything looks as good as it should. Although large chassis volume, everything is filled up to the roof. Not all parts are visible as they had been hidden inside protective shielding. The uncovered ones drive attention at once: top-spec Mundorf Supreme Silver-Gold coupling capacitors or foil capacitors at anode filter. The rest is nothing to complain as well, especially as they're carefully mounted in double-side technique – the circuit board is so stiff it doesn't bend even under higher pressure. Soldered points are wrapped with golden rings and signal traces are lacquered, which prevents corrosion. The designer took care of proper space between modules, providing air circulation and making them work in comfortable conditions.

The signal path starts with source selector circuit board, operated by Takamisawa relays. It's clear that input selector knob on the front panel is there mainly for design purpose (also it makes pre-amp look traditional) – its position is read by microprocessor anyway. It passes command to switch the input on. Auris could have been equipped in immaculate smooth front panel then – leaving all functions remotely controlled. Same thing with volume control, which is free from mechanical potentiometer. Instead of that high quality Burr-Brown PGA2320 stereo modules were used – one for each channel. This solution gives only advantages, providing stability of parameters in time and more than necessary resolution – volume is controlled in 80 steps. It works equally from the bottom of scale and it's easy to build symmetrical circuit thanks to this solution. Additionally, you can use it for channel balance. You might not need it at all because volume control works perfectly, but in case of bad recordings or poor room acoustics, you can use electronic correction. On the pre-amp circuit board we can see OPA2334 op-amps. They're probably used for buffering signal on potentiometer output and matching it to the tube stage.

Potentiometer circuit board is located just behind input selector. Thanks to this the signal path has been shortened. If the device is equipped in phonostage, it's mounted aside in chromed box. Out of size estimation, its design must be solid state. Out of potentiometer, the signal goes to four 6N30P-EW double triodes. They are modern Sovtek products, made in the year 2009. All of them are mounted in elastic sockets made of beryllium copper and work in class A. The whole circuit doesn't have global feedback. At the end of signal path there are eight 1.5  $\mu$ F / 1000 V Mundorf Supreme capacitors. They eliminate possible DC out of the signal. Manufacturer assures us it won't affect the bandwidth at all. Considering their size, we can trust them in 100 %, especially while there's parallel pair of those for each half of the signal, doubling overall capacity.

The signal path is very simple but perfected in terms of assembling and quality of the components.

Similar to recently reviewed Crossfire, the space is filled mainly by power supply circuits. The designer gives us a message that only clear, stable and ripple-free voltage allows to extract the best sound performance of signal path. And he is not alone in this philosophy.

Power supply along with driver and control modules are placed behind the front panel. Custom microprocessor IC programmed especially for Auris is exposed in small gap made for this purpose. The rest is closed inside massive steel enclosure, hidden from sight of nosy users. Under the hood there must be power supply transformers (it's the only possible place, I cannot see them anywhere, probably EI type because Ayon is not friendly to toroidal ones at all), display and – considering description on manufacturer's website – chokes being the part of power supply for signal tubes. The latter are treated in very special way, incorporating four 6Z4 double rectifier diodes.

These tubes are placed in ceramic sockets and pressed by thin wire clamps at the top. Thanks to this solution they are mechanically stable to stop vibrations cause additional noise.

These tubes are probably powered by separate transformer. The anode voltage is filtered by two electrolytic capacitors and four parallel polypropylene ones. The latter ones are responsible for more accurate "cleaning". Heating voltage is 6.3 V – it's taken from separate winding and stabilized. The remaining circuits are powered by rectifier diodes, separate electrolytic capacitors and solid state stabilizers. Additionally, there are adjustable resistors setting power voltage for op-amps in more accurate way. The preamplifier is equipped in soft start circuit for signal tubes, increasing their lifespan. Starting sequence goes for about 50 seconds and during this time cathodes are pre-heated and parameters checked. If everything's alright, relays switch on input and output sockets and the device is ready to use. The manufacturer states that Auris is at maximum sound performance after approx 1 hour of playback.

### **Configuration**

Auris is not demanding for the rest of sound system at all. Input impedance is 100 kΩ which allows hooking up any music source easily. 300 Ω at the output means that apart from certain extreme transistor loads such as Soudal or Burmester power amps, the Austrian pre-amp should be able to drive vast majority of amps. The battery of coupling capacitors guarantees that even if power amp has not very high input impedance, low frequencies will be reproduced in accurate and way of "full spectrum".

Yes, the factors driving you to buy Auris won't be only technical, but rather in terms of sound quality. It has to be said despite each available configuration means more variables. One should check first if the pre-amp matches and what possible changes appear after hooking up. There is one certain thing: there will be changes – the Austrian device is not the one to hide in the shadows of others. It's got character, very subtle but clear enough to spot by advanced listener.

For review purpose Auris was connected to three separate power amps: Ayon's single-ended Crossfire PA (HFIM 12/2014), ModWright KWA 150SE and Sanders Magtech. Note: the last one wasn't the good choice at all. I wasn't even able to describe the sound in terms of "hi-fi", not to say "high-end". Some frequencies were just filtered out and some exposed. Summing up: not even bandwidth at all. Swapping pre-amp for Sanders Audio made the whole system sound very good – we had a preview of that during Audio Show in 2014 as it was powering up tiny Boenicke W8 speakers and the sound accompanied by British CAD got opinions of one of the best during the show. But let's put the Sanders incident aside. Auris turned to be perfect match with Crossfire and as ModWright. Maybe Magtech requires feed from specific transistor setup and doesn't like tubes at all. Its manufacturer doesn't mention input impedance of this power amp so it's hard to say who's guilty here. But the cases of mismatch might be really rare. And once we decide the setup is limited to tube amps, it should be at least OK. Beside power amps I mentioned the system consisted of Avalon Transcendent speakers and Accuphase DP700 CD/SACD player. Wires were taken from Acrolink catalogue: 7N-DA2090 Speciale RCA and XLR interconnects and 7N-S8000 speaker cable. The voltage was filtered by Gigawatt PC-4 Evo along with Acrolink 6N-PC6100 and Gigawatt LS-1 MkII power cords. They were put onto Stand Art and Sroka audio racks and feet were put onto anti-resonance elements: Symposium Acoustics Ultra Padz. It's one of the best cost-effective upgrades I've been able to experience. It does its best especially with amps. The system was playing in 16.5 m<sup>2</sup> room with small acoustical treatments.

## Sound review

It's hard to imagine more underestimated hi-fi component than line preamplifier. Phonostage modules are necessary as they linearize the uneven signal of cartridge. But what about line pre-amp? I bet even power cords are treated more seriously. And it turns that line preamplifier not only sets the basic standards to whole audio system and allows to choose between music sources but also provides the proper drive for power amp – variable outputs of CD players are usually not good with that at all. Pre-amp means putting the critical factor in hi-fi systems, volume control, to another level. Potentiometer is always hearable in signal path – the matter of sound performance is how good the quality of volume control is then. In case of Auris it's satisfying. Very satisfying. The device is showing its own character but works as perfect seasoning added to the delicious main course. It winds up impressions, enriches taste but doesn't exaggerate and keeps all proportions.

Its influence is subtle and clearly positive. It sneaks in a bit of warmth and softness but won't overheat nor soften the contents. This delicate interference results in coherent sound and extraordinary micro-dynamics and resolution. Even the best analog potentiometers implemented in very expensive CD players and DACs cannot guarantee this kind of performance.

And let's not talk about digital volume controls because even the most advanced ones loose details during low volume playback. Auris is able to reproduce excellent body and saturation even on the level of silent whisper.

The Austrian preamplifier isn't the one to pass the signal as it is and just put it to power amp. During the review of Crossfire PA it turned out that pre-amp is much more likely to upgrade the system than power amp. The latter turned to be very transparent, almost neutrally colorless and gifted with somewhat shiny trebles. It sounded ethereally, very transparent, detailed and matched ideally to lightning-bolt fast Avalons. Auris gave some body to this image. It put the whole sound more "stable onto the ground". It filled the air with lively tissue and loaded some serious mass wherever needed. It was this pre-amp, not triode power amp which brought in some serious warmth and defined the overall tube impression. And it was so charming and smooth, the listener's attention was all ears. Listening session pulsed with dynamics and surprised with so many highlights. Considering this context, the only excuse to use Crossfire PA without Auris would be the economical aspect.

Otherwise sound performance leaves you with no doubt. But it's not a result of synergy between devices made by the same manufacturer. Let's swap Crossfire PA with ModWright KWA150SE and impressions will be exactly the same. Same aspects, same scale. The only exception was in range of lowest bass but ModWright has better current capacity thanks to its transistor muscle. Auris didn't limit the power amp though nor slowed down the energy transmission. There was a doze of warmth, softness and rounded shape again but control and tonal richness were excellent. Listening pleasure was on very high level and I just couldn't wait to play another albums.

This is the way correct modern tube setups should sound like: all advantages of tube technology combined with full signal bandwidth. Auris plays some modern sound in best aspects of this meaning. You can hook it up to very fast and transparent system because it won't slow down bass and filter out trebles. It's another point for tubes as it shows all the natural warmth and microdynamic energy. Once transistors have to make crucial aspects vague or averaged, Auris saves all available colors and resolution. It's not necessary to turn volume up to enjoy your music. The sound is filled up and lively even at low levels. It allows enjoying music playing in the background as well.

The very last aspect is soundstage. There are so many details – no doubt for anyone I think – but there are way more visible comparing to lack of this pre-amp. The soundstage is put between the speakers and it's clear that artificial wideness is not priority here. The soundstage is wide enough to make necessary order and leave amount of air between instruments. Lack of exposed foreground is a great help here – there's nothing push to the front out of speakers line. Everything starts behind this line and depth reaches back wherever it was recorded on the album. It seems to be unlimited but it's not simple "stadium effect" but rather reproducing correct aspects of the recording. It can be huge as we listen to big symphonic and very domestic in case of acoustic jazz.

After two months spent with new Ayon preamplifier I was very sad to send it back. It was excellent match with ModWright as well as Crossfire PA. Of course I can still listen to music straight from my CD player, but it's not the same. It's not even close to Auris.

## Conclusion

Don't underestimate preamplifiers. Especially as strong as Auris is.

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