

Integrated amplifier
Audio-Akustyka IMPETUS

Price: 7500 PLN

Distributed by: Audio-Akustyka

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Audio-Akustyka, Leszek Szalaszewicz's company, the author is an integrated amplifier Impetus is a completely new phenomenon to me. I heard it for the very first time about two months although one can read at his website that people related with Audio-Akustyka had dealt with audio issues since 1999. We can read on:

"We are involved in what we do best as our company has specialized in constructing tube amplifiers in class A. In our constructions we apply our own design layouts using innovative technologies and only the highest quality parts, so that we are able to achieve the best sound out of our tube amplifiers."

The tested Impetus, based in the power section upon tubes 6P14P, is the cheapest and simultaneously latest amplifier of this firm, the part of the three-element catalogue, where higher we have a model Auris with tubes EL on the output and at most Primus MkII with triodes 6S33S. An important word in this sentence is „the triode”, referring also to the tested amplifier, despite that in Impetus one applied on the output of the tube 6P14P. It is the pentode of the Soviet power still produced (the type THE NOSE - in tested copy it came from years 89-90) whose with the equivalent (but not direct) are known to all tubes EL. One can also apply EL. At all events, although this are the pentode, Audio-the Acoustics applies it in the triode configuration, in class A. What is more - though the device come placed with the push-pull mode, one can change it into the single-ended one with the use of a remote control.

Yes, Impetus is provided in the remote control with which - except the volume control and the balance wheel - we can switch on/switch off the feedback, too. What is more - it is the system-remote control to whom we can steer with players with CDs reactive on the code Philips or Sony. The instruction speaks about the one more mode - 'Turbo' which however it does not comment. The firm declares that all changes can be performed

on-the-job, without the necessity of its switching off. Because 'Turbo' did not calm me, I asked the producer about it, Mr. Leszek Szalaszewicz who described it like this: „This is the mode which is obtained by the jumpering a transmitter of the output transformer, and more exactly adding of some windings to exit-tubes. Not very I knew, how {as} this to call and I called a little inelegantly "turbo". The activity of this mode is close to the characterization 'presence' and surely it should be described so. It is not described more exactly in the instruction, because it seems that the full particulars for the user are not necessary, he has to know that such mode is at command, and what will hear enclosing him, let himself evaluate and choose. The jumpering of modes causes enough loud effects in loudspeakers, however this is safe for loudspeakers, but I work on this, during the jumpering to introduce the amplifier into the state mute.”

All that caused that the amplifier had seemed to me as a really curious example of the use of the tube technology. Clearly, it is visible that one goes for maximizing of the quality of the sound, at the expense of the power - this, in spite of the use till six power valves on the channel, amounts only to 16 W, with the power consumption of 160 W. From outside the device looks exceptionally pompous, is heavy (25 kilograms) and large. The test-copy was made from the polished stainless steel, but is accessible also in the black colour - dull or brilliant.

AUDIO MONITORING

CDs used for testing:

- *HiQualityCD. Jazz Selection*, EMI Music Japan, TOCJ-90010, HQCD + CD; opis TUTAJ.
- Ben Heit Quartet, *Magnetism*, Acousence Records/Linn Records, ACO80108, 24/192, FLAC 24/192.
- Buck Clayton, *How Hi The Fi*, Columbia/Pure Pleasure, PPAN CL567, 2 x 180 g LP.
- Clifford Brown and Max Roach, *Study In Brown*, EmArcy/Universal Music Japan, UCJU-9072, 180 g LP.
- Depeche Mode, *World in My Eyes/Happiest Girl/Sea of Sin*, Mute/Sire, 21735, maxi-single LP.
- Don Friedman Trio, *Circle Waltz*, Riverside/JVC, VICJ-60258, XRCD.
- Jim Hall, *Live!*, Horizon/A&M Records/Universal Music Japan, UCCM-9225, CD.
- King Crimson *In The Court Of The Crimson King*, Discipline/Universal Music Japan, UICE-9051, HDCD.
- Laurie Anderson, *Homeland*, Nonesuch, 524055-2, CD+DVD.
- Lionel Richie, *Can't Slow Down [DeLuxe Edition]*, Motown/Universal, 181202, 2 x CD.
- Lisa Ekdahl, *Back To Earth*, BMG Sweden AB, 614632, CD.

- Michael Jackson, *Thriller. 25th Anniversary*, Epic/Sony Music Japan, EICP-963-4, CD+DVD.
- Pery Como, *Como Sings*, RCA/BMG Japan, BVCJ-37258, K2 CD.
- Robert Plant & Alison Krauss, *Raising Sand*, Rounder, 478020, 24/96, FLAC 24/96.
- Tori Amos, *Abnormally Attracted To Sin*, Universal Republic Records, B0012906-01, 2 x 180 g LP; recenzja TUTAJ.

A meeting with a new producer, the newly developed product is like a blind date. You never know, what will come of it, how the other side will keep, nor even, how you will behave yourself. It can be wonderful, but as well - and even more than „equally” - it can end with a disaster. To get to such a meeting and to make a sense of it, bilateral confidence and the faith into this is necessary . This type of event lets, however see something new, something, what at last enriches us and develops.

Impetus is just such a device. It was not necessary to listen for long, to find that its sound is ripe, competent and that results from conscious elections, and is not a composition of the chance and the hazard. He differs considerably from the stereotyped sound - both tube one, but and of the transistor. It is, first of all, very dynamic, superbly distributive, first of all if one goes for the top and the bottom, the sound. One can shape it in the large measure taking up an option push-pull, 'Turbo' and the feedback. Every of these changes bears on the sound very strongly and in the univocal manner. Most audio monitorings were done with the switched off feedback, with included 'Turbo' and in the configuration... push-pull. 'Turbo' really all enlivens, accelerates and „finishes burning”. The name is so absolutely on the premises. With loudspeakers I had (Teutons Physiks HRS 120 Carbon and Chario Academy Sonnet), so with not at all easiest to rounding up, the inclusion of this mode was univocally positive. Adding SZ made for light „turning grey” of the sound, but also changed the tonal balance wheel - the top was softened with it , lightly withdrawn. At good jazz-canned music this was the step back.

Surprisingly, soothingly SZ acted, however on recordings about the not very perfect colour, where the withdrawal of the top was of use. Where the somewhat better inspection of the bass was decidedly on the plus - I mean records by Lionel Richie and Michael Jackson. And at last PP... Here I had most fun, because the producer bedded down to the test the amplifier on which to the advance party incorrectly one cut out „push pull” instead of „single-ended”. Choosing „the monitoring”, I chose the position in which the suitable little tube did not burn, and the sound was louder. I could not explain it to myself, because after all, I had to glow at the mode PP in which the sound is quieter - the part of the output signal one adds to the entry (with the opposite sign), wherethrough the signal is somewhat lower. In the mode - as it turned out - the SE sound was excellent, but I seemed that the amplifier dealt with my loudspeaker too weakly, it was too quiet.

Maybe with other, easily-adjustable constructions, in other room better the SE arrangement would be better, but univocally it played better with the PP mode for me.

In this case the sound was dynamic and very spatial. One goes first of all for the arrangement of the scene across and for the surround effects resulting from the manipulation of the anti-phase. This is to be discussed later on. Maybe because the coherence of the all remittance was even more important. This was rich internally, the full sound. In this configuration a light contouring became visible, i.e. not large, but projecting onto the entire reception, the emphasis of the average bass and average high pitches. One does not go for edges themselves, because these are lightly warmed and are not decisive for the reception, and it is just for their centre. The diameter itself is beautifully saturated, especially as for the amplifier costing the above money, but at the region of 1 kHz it is lightly withdrawn, is not developed so well, as the rest of the band. Here one can hear that this is not a top-model the amplifier and that the tube are such as they are, and not the other. I have nothing against EL and derivatives, I admire my own Leberna CS-300 X (SP), and also Stingraya by Manley (HERE; now available in a new version), however I am also conscious of their limitations. Here one got out of them the succulence, the elasticity, „the meat“. Because this just the way they are characterized. As I speak, the top is in Impetus, too as for this money and these tubes, exemplary. However, yet another ability is crucial here - the presentation of elements on stage is here above average, on the level with the tubes comparable to my modified Leberna CS-300 X (SP). Apparent sources, that is instruments and voices, are drawn in the massive, „concrete“, solid manner, considerably better than in all transistor-amplifiers up to 10000 PLN and meaning most of the tube amps worth this money. Impetus splendidly shows the arrangement of elements across in front of us, but also from sides and behind us, of course as far as this is this type of the recording.

It happened that together with Impetus I also tested London (Decca) inserts, the Jubilee model first of all. These inserts are characterized with the bulkiness of genius. Impetus splendidly showed this advantage. He „did not summarize“ all in several lines before us, but spread wings and e.g. at the maxi-single Depeche Mode *World in My Eyes/Happiest Girl/Sea of Sin*, especially predestined to such tests, I got the huge scene, my own kind of a „semisphere“, shown without tarnishings and without weaknesses. The dimension far inside was very nice, but it was nothing to skip above the average for this money - it be easily heard with the mono canned music, such as *Study In of Brownians* Clifford Brown and Max Roach, and also *How Hi The Oh Of Buk Clayton* at which building of instruments, their volume was quite good, this was not restricted, but already the show, how these instruments are in relation to themselves on stage it was not so spectacular, as at mono canned music. It is proper to return on the superb work of the bass. He is gently round, but even with enough difficult loudspeakers it behaved splendidly, because it was pulsating, resilient, engaging a saturation. The double-bass had right sizes

(as for the home system), and the bass guitar cut strongly and low. I Liked it very much .

We have to realize that in spite of the superb sound, as such, the excellent „value”, i.e. putting the sounds into the concrete money, Impetus has its own limitations. I would not would not exaggerate with their underlining, because it will be enough to listen to it for a while, to know that it is something special, but so that the description be complete, one cannot also pass them over in silence. I have already mentioned one of the limitations. It results, at least I get such an expression, from one element which also I have already recalled. I would like to be well understood - I speak about the superb amplifier which wallops the large part of devices for this money, and at least shows certain superiorities. He is not, however, an ideal and its infirmities are also important, because only the list of advantages gives the possibility of a moderately good inspection and the resoluteness about the accompanying system. Speaking of the resolution of the mid frequencies. It is most difficult fragment of the band for its proper reproduction, because we are genetically „programmed” so, as to hear the voice best (especially the childish one). That's why the distortions are quickly caught, and small swings of the colour at once caught. Impetus has a very nice, smooth centre, without some of the distinct anomalies. What other, more expensive devices show better, eg. my Lebera, is its resolution. Impetus has a lightly calmed dynamics of 600-800 Hz, what in conjunction with what I have already written means that is not always vocals, but also the electric guitar of Jim Hall etc., will be so tangible, as compared to what's around them. Even the voices of Tori Amos or Foxes Ekdahl were strong, pure and distinct. Because what was lower a bit dead-beat, was in fact really prominent. Therefore, I will understand if somebody prefers the SE mode in which the higher part of the band is lightly lowered, thanks to what the whole somewhat becomes even. One can hear it splendidly on *How Hi The Fi* by Buck Clayton where the all recording has the limited band of the transfer and its hard core is concentrated around the centre - the whole was calmed and did not have succulent colours. It is of course a kind of exception, because the superb part of my collection plays with the wider band, but it is worth paying attention to it.

Impetus is a tube amplifier, so theoretically, due to the technology, more prompt to small faults, most often connected with tubes as compared to the solid-state amplifier. However, I did not have with any problems with it - it played from the first „shot” and played so all the time during the audio monitorings. He warms like hell, therefore it is necessary to leave quite a lot of space around it. The knocks coming from loudspeakers during the jumpering between different modes were Irritating, but it is to be quickly improved. This type of aesthetics, I speak about the plastic project , does not appeal to me, but to my wife, so very critical towards „inventions” which appear in her living room. Anyway, she like the amplifier very much. I think it is proper to think about somewhat better knobs, but it is a trifle. The most important is the fact that it is hell-well playing device. Its sound can be fitted to one's own system and the taste, but in any case it will

offer a set of unusually desirable features , such as purity, saturation, dynamics, space. But for the limited resolution and the dynamics of the centre, being simply on level of 7000-8000 PLN, it would be a serious competitor for a much more expensive Leberna CS-300 X(S). However, Manley Stingray is within its range. Naturally, it is worth remembering that the American device is better built, has an iPod dock and some other facilities. It also comes from a renowned firm, so selling it off should not be a problem. As far as the sound is concerned, despite a huge difference in price Impetus face up to it with due respect.

CONSTRUCTION

Impetus is the latest integrated amplifier by Audio-Akustyka. It is based upon the PCC88 tubes (the equivalent ECC, but with glowing of 7 V instead of 6,3 V; here as produced by Tesla), double triodes, two on the input and six power pentodes 6P14P, working in A-class in the triode mode. These are Soviet tubes, the equivalent of EL84, but stronger one, with less noise etc.. They can work in the push-pull mode or in parallel in the single-ended mode. The yellow diode indicates the chosen mode- it shines at push-pull, goes out at single-ended. Although there are many tubes, they hide behind a very large mug covering transformers - the toroids of the feeder and the output transformers. The outlook of the front side indicates this that the amplifier has a dual mono construction - we have separate volume knobs for the left and right channel and separate switches of inputs. Their reflection is a rear side with inputs located extremely on their sides - out there we have four pairs of RCA sockets. There are also loudspeaker outputs (four clamps per channel - minus and three pluses) with separate taps for 4 and 8 Ω . Unlike usually, the choice of the concrete burden must be confirmed by metal-armatures connecting the individual sockets - the description can be found in the operating manual. The sockets are connected with the so-called „silver polishing” - with silvered, copper wires. The casing of the amplifier was made from thick sheet metals and glossy- polished stainless steel. On the front and rear side, additional think plate were glued on in which the inscriptions were laser-cut. Company's logo is also cut on the capsule covering transformers. The former one is huge and it suggests that the size of the of output transformers and feeder is pretty big. Impetus stands on four brass spikes - because it is a heavy device, one ought to find some pads. It is very important that the device is steered with a remote control - at command we have a volume control, the balance wheel, and also all functions of the CD player CD as long as it uses Phillips's or Sony's codes. The remote control also triggers the push-pull mode, the feedback and the 'Turbo' mode.

To see inside, one should screw off the bottom side. It is protected by a seal - but not a paper one, but the metal one just the same as used by customs officers. At first the company insisted on not showing the interior, because a part of solutions is author's, but I had to make the matter clear - we show everything we can... And we can seen many interesting items.

Impetus is built in the point-to-point technology: the only little plate occupies the receiver's system for the remote control. The resistors were soldered directly on tube stands' legs - these are metalized, precise elements...the Russian ones. Exactly the same used by Mr. Andrzej Markow in his preamplifier Absolutor - there are plenty of them in Poland, from old stocks ... There are not coupling condensers - namely, Audio-Akustyka applied an innovative system in which the coupling between individual levels takes place without the participation of capacity. The feeder is very developed and Rubycon filtering condensers were used and two (one per channel), powerful, beautiful BHC Aerovox condensers. They are accompanied by chokes which look like chokes for stabilizers of fluorescent lamps. Another two chokes, smaller ones are visible at the pre-amp section. The entire system is a dual-mono construction, symmetrical towards the network cable going through the centre. Also, there are two separate feeding transformers feeding. These are toroids, put one on the other, on the M8 rod.

The signal from the input is led by four Klotz MC5000 cables (the microphone ones) to the mechanical selector (I speak about one channel) on the front side, and afterwards, by a short cable to the black Alpsa potentiometer integrated with the engine. Afterwards it goes to the input tube grid. The whole looks typically for this type of devices, it is not so wonderfully arranged and ordered as in my Lebena, but let us remember this the Japanese are crazy about the details.

Technical data (according to the producer):

Band width: 20-16 000 Hz

Output power: 2 x 16 W

Power consumption: 160 In

Tubes used: 4 x PCC88 + 12 x 6P14P

Inputs: 4 x linear

Dimensions (WxHxD): 420 x 230 x 350 mms

Weight: 25 kilograms