

LUXMAN M-800A



Just like I wrote in the issue number 40, in the test of the amplifier [L-505f](#), [Luxman](#) just gathers momentum. After many years of “captivity” in the company Alpine Corporation, it finally emancipated. One cannot rebuild a whole portfolio just in one night, so most of the interesting solutions are taken from previous models, just modifying those to satisfy the demanding customer. Beside those, new products will appear shortly, but surely. The monumental mono power amplifiers B-1000f and the accompanying preamplifier C-1000F were first, built to celebrate the 80-th anniversary of the company. Shortly afterwards the power amplifier M-800A appeared. It uses the solutions developed for the flag model, like the inventive feedback circuitry named Only Distortion Negative Feedback, the mechanically tuned looking for best sound, enclosure, copper rails used to transfer voltage from the transformer to the capacitors, special feet from high-carbon steel (something like [Accuphase](#)), with something extra – it works in full class A. At a weight of 48kg it gives only 2x60W, but it is 2x120W at 4ohm and 2x240W at 2ohm and a brilliant 480W at 1ohm, a load, at which the amplifier still works stably. The M-800A shares one more thing with its bigger brother – the bar-graph output power display. And this is the only thing I don't like in this design – this display has no practical use and is annoying. Fortunately it can be dimmed or turned off... Anyway, it seems that this device is the first, that allows us to look into the kitchen with newest conceptions of Luxman. And shortly we will get a preamplifier matching this power amp, the C-800f and a set C-600f + B-600f. It seems that the things are going well.



The power amplifier from Luxman arrived in a big wooden box and was to stay for the same amount of time as other devices do. After listening sessions with class A power amplifiers from Accuphase (test A-30 [HERE](#) ; A-45 [HERE](#); reportage from a meeting where the A-55V were listened to [HERE](#)) I knew what to expect, more or less. And I was not mistaken. Besides the mentioned power display, that I cannot get accustomed to, Luxman showed, that for relatively not much money – as for top hi-end – a device can be prepared, that competes with the best. What came out of that – please look in the SOUND section.

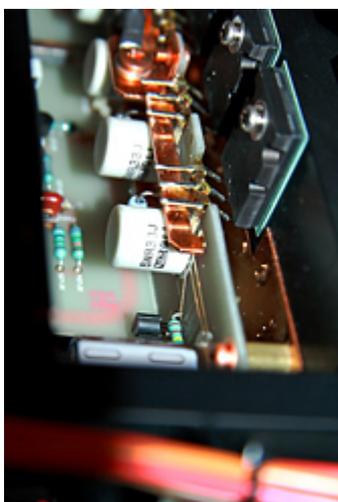
SOUND

Lots of free space around the amplifier is the first thing we have to care for. The Luxman gets really hot, regardless if we play music or not – that's class A. I think the level of heat is comparable with a big 845 tube amp. So it is preferred, that the power amplifier gets a place on top of the equipment rack or – even better – a separate dedicated stand. The second thing is the choice of the input. Looking at the block diagram, the Luxman is a fully balanced device, but – just like the [Nagra](#) or [Accuphase](#) – the input is unbalanced, and made symmetrical afterwards. I am not sure if I read the blueprint well – it is not very precise – but it looks that way. Maybe there is an error somewhere, because every time I connected it to the source or preamplifier, I preferred the balanced input. Even when the Nagra CD-P

player was in the system, an unbalanced device, and the signal for the XLR is being prepared just at the output. I start the test with this, because this is very important to understand the character of the sound of the device. The RCA input sounds more gentle, with laid back top frequencies. One could even speak about a withdrawal of that sub-range, maybe a result of the softening of the attack. Switching quickly between the inputs, remembering about matching the playback levels (XLR outputs have a 3dB higher level, because we have a two times higher voltage: the positive and the one with reversed phase) clearly shows, that the XLR input is much more resolving.



And resolution is one of those things without which one cannot talk about hi-end. This is of course one of the many components, but incredibly important. In this aspect two amplifiers are a standard for me, at least here and now (I mean those I know very well, preferably from my system) the new amplifier Silver Grand Mono from the company [Ancient Audio](#) and the Krell EVO 402. The first one is a tube device, based on the 300B (with a carbon anode), the other one is a solid state device. The first has 18W output power, the second one 400W. The Ancient is unbalanced (it is a SET device), and the Krell is fully balanced. They sound differently, but both are unusual, incredibly advance constructions, representing a brilliant resolution. I have no preferences in the tube-solid state battle, and I hope it is visible. The Krell differentiates the bass and lower midrange better, and the Ancient – the midrange and treble. I I'd compare the Luxman to those, then I would say that it is a bit worse than the Ancient in the ranges the latter excels, and from the Krell in its kingdom. The case with the treble can be heard very well in recordings from the 50-ties and 60-ties. Although the recordings themselves have a cut frequency range, more than newer discs, but only on those recordings the phase relations remained intact, unchanged, and those are the things that build the real event. Just the extension of the frequency range is only a small step and can give worse effects than a narrower one. Let us take the CCD discs as an example, copy protected (a new information is that EMI stood down from copy protecting its discs!!! This means that the Compact Disc logo will re-appear on their discs – like the Rudy van Gelder remasters). Their biggest disadvantage was the dramatically bad treble and upper midrange. The treble on those discs (as an example [Thunderbird Cassandra Wilson](#) and [Love The Beatles](#)) lacks coherence, as if it would be splashed between the speakers. There is no talking about attack – vibrant and energetic element, that creates an open sound on good discs. If this sub-range would be withdrawn a bit during recording, use a tube plugin or something, it would be much more pleasant. Anyway one cannot talk about continuity of the sound, about the instruments being precise and natural. Older recordings are characterized by that continuity. But let's go back to the Luxman. Ancient shows the midrange and treble in a brilliant way – there is no "tube" sound, it is just fantastic sound. The Luxman sounds with a tonal balance similar to that construction. But when one of my friends, who uses an Accuphase system, heard the M-800A for the first time, he was surprised with the energy this device has in the upper regions. The amount of sounds, energy balance (because this is not a rude upping of the treble) is in the Luxman just like in the Silver. The differences are on a very deep level – there, where the plausibility of the transmission is confirmed by drawing the air between the performers, there, where we talk about far planes. There Luxman is a bit behind the Ancient. But... It is really hard to achieve such a level of integration of harmonics and openness as it is done here. And it is not brightening. When we play o disc from China *Diamonds and Rust in the Bullring* Joan Baez ([Virgin/ABC Record](#) , K2-041, K2 CD – this is one of Asian pearls. It is worth to explore those recordings, but you can get a dud), and you know from the beginning, that due to the technology as used on XRCDs the beautiful vividness, cleanness and resolution is kept. But those are quite old recordings, and furthermore coming from concerts. If a system sounds a bit too bright, the recording sounds a bit glassy. Luxman showed brilliantly that this is a splendid disc and the assets of the K2 super coding are undisputed.



Now the other border of the sound frequency spectrum. Here Krell is the king. Absolutely. Never in my life, maybe with the exception of the top systems Evolution One and Evolution Two, I heard better articulation, focusing and control. It is not about the amount of bass, because the power of the device is not transformed into droning, but into quality. Switching from Krell to Luxman the uncompromising character of the bass disappeared. It was not that well controlled

and it could be heard, that there is a slight loosening of this sub-range (but let us remember, that we are talking in hi-end terms here, so "loosening" can be compared to the best devices only), as if the Japanese amplifier would try to compensate for that with spirit. But the 60W of the Luxman allowed to come very close. In absolute terms Krell is king, but if we come down from the top to "normal" hi-end, then it will turn out that the Luxman's bass is very organic, fleshy, with good control and terrific timbre. [Violator Depeche Mode \(Mute, DMLP 7, 180 g LP\)](#) played from vinyl, due to, among others, the splendid gramophone preamplifier RCM Audio Prelude Sensor IC, with the opening piece *World In My Eyes*, as well as *Tour The France* from Kraftwerk (EMI 591 708 1, 2 x 180 g LP) sounded beautifully. The big, deep and tight bass, splendidly connected to the midrange, and the midrange with the treble. Yes – the thing that lets this device stand out from the crowd is, besides the resolution, an exceptional fluency of the sound, playing with the whole picture, without dividing into treble, midrange and bass. When we compare directly best contrabass recordings, like those from the disc *Pasodoble* Lars Danielsson and Leszek Możdżer (ACT 9458-2, CD) on the Krell and Luxman, it can be heard that bigger power allows for a deeper, more three-dimensional drawing of the instrument. Those are not big differences, but when we talk about the best that can be achieved, then we should pay attention to this.

Finally the midrange. This is the sub-range that is most difficult to reproduce, and in this case its quality is strongly related to the way of connecting the power amplifier. Driven directly by the analog output of the [Lektor Prime Ancient Audio](#) it sounded most vivid, most transparent, brilliantly un-colored sound. It sounded the same with the Mark Levinson No. 390S, but there was more of the beefed-up upper bass. A slight problem was the lower midrange, that was not saturated enough. And it was not even about the timbre. Connecting the preamplifier Accuphase C-2810 saturated that sub-range, amplified the bass, but made also the former resolution disappear. The treble became more noble in a way, it became more smooth, but it did not have that openness and attack anymore. I think the key here is the buffering, adjusting, but without the change of the timbre, without the losing of the resolution. Because when I connected the [LINN](#) Majik Kontrol to the Luxman, it was clear that those fit together. One could not talk about the refinement of the Accuphase or the precision of the direct connection to the CD, but the timbre of the lower midrange was splendid. This means it can be done. It would be best to try the M-800A with the C-1000f preamplifier of the same company, but the arrival of the latter got more and more delayed (those are made on request only). Anyway, it is known now, that this is not the fault of the power amplifier itself, but one needs a classy preamp. It has to fulfill two conditions – to be ultra-transparent and it cannot be colored.

Two things – stage and dynamics – are directly related to the above dependencies. The dynamics is brilliant. Every small element has its own surroundings, articulation, etc. It is heard best on the mentioned disc from Możdżer and Danielsson, with the outstanding piano, but even greater impression was made by the disc [Midnight Sugar Yamamoto, Tsuyoshi Trio \(Three Blind Mice/Cisco Music, TBM-31-45, 2 x 45 rpm, 180 g LP, #0080/1000\)](#), where the piano hammers hit directly the diaphragms of the Dobermann from Harpia http://highfidelity.pl/!ev/artykuly/18_09_2007/harpia1.html. But you have to take care, that the preamplifier does not strangle it. On the other hand the stage seemed better with preamplifiers. Maybe only the drawing of the instruments was slightly better without them, but the coherence, planes and their construction gained with a good preamplifier in the sound path. The first plane is presented very well, just behind the speakers, and the stage reaches far behind. It is not an expansive type of the stage, like in Accuphase devices, that can charm with palpability and velvetiness of the factures – but promotes more delicate strokes of the brush.

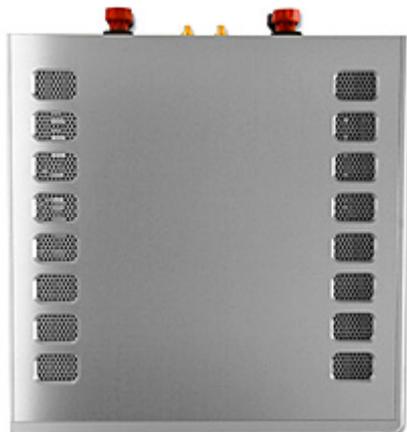


The Luxman power amplifier is a brilliant device. It does not sound like a transistor nor like a tube. On one hand it a bit behind the best amplifiers from those camps, but those are more concentrated on their assets, and the Luxman can probably play everything on the same high level. A problem is, that it needs a high class preamplifier. But this is good – against appearances. Fabio Camorani, the owner and constructor of the company Audionemesis (test of the DC-1 [HERE](#), PH-1 [HERE](#)), during a visit at my home in the summer vacation period, defined his idea of which equipment is better and which is worse. In his opinion the differentiation is very easy: the device that allows to hear more of changes made before it in the sound path, in this case the discs, player/turntable and preamplifier/cables, is better. And I think there is something in this statement. It can happen, that some aspects are embossed, like in studio equipment, that is sometimes like a magnifying glass and enlarges some changes, but we can assume, that this is one of the main characteristics that differentiate audio products. In this aspect, as well as the pure pleasure of listening to music the Luxman amplifier is something special. And who knows, maybe this is the power amplifier I was searching for...

DESCRIPTION

The Luxman M-800A is a mighty, incredibly heavy piece of metal, weighting almost 50kg. Its outer shell is made with incredible attention to detail from very thick aluminum plates, that cover thick steel plating. The edges of the front panel are rounded on the side, that makes it look lighter. The most important design element of this part is the separated fragment with carvings, that shine yellow light. It turns out that this light is a bargraph display. It has no practical meaning (it has no scale), and if it annoys anybody it can be switched off. The plate inside the separated part is finished in a different way than the rest of the enclosure – polished and satin aluminum – because it is etched, and it stands out from the panel. We will find three LEDs there – one shows bridged mode, second (blue) one balanced input and the third (yellow) is for stand-by. The front carries only the stand-by switch and two small buttons – one for RCA/XLR toggle and the second one to switch off the front lighting. The back, although there is not much happening there, looks as professional as the front: we have balanced inputs and unbalanced ones (the latter are quite a way apart, so thick plugs can be used) and big, splendid speaker terminals, that accept only spades and bare cables, a grounding terminal, preamplifier control socket (on/off), stereo/bridged toggle switch, a mechanical power switch and

an IEC mains socket with polarization indication. The top cover is as thick as the front and it is equipped in beautifully cut windows covered with perforated aluminum plates. To get inside we do not take off the top cover, unlike in other amplifiers.



And the insides look beautiful – like Accuphase amplifiers, or even better. It is divided in a few sections by shields – the power amplifiers are on the sides and the power supply in the middle. The amps work in class A, in a push-pull setting. For every channel there are sixteen Toshiba 2SC5200+2SA1943 transistors, bipolar ones. Usually MOSFETs are used, due to their more pleasant, similar to a tube, sound. But the unipolar transistors are almost impossible to pair – one cannot complete a push-pull with ideally identical transistor N and P channel. Some companies, like Creek, use a quasi complimentary setup, but there is a problem with phase inversion in such settings. Anyway, the amplifiers are fully solid state, and in the grounding thick copper rails are used. Actually copper and copper coated elements are widely used here. The power supply is hidden below another layer of metal, only the input AC filter and the stabilized power supply for the input and control sections are visible. The transformer has separate windings for the power amplifiers, both channels of the preamplifier and logic circuits. The voltage for the current section is taken from the transformer by means of copper rails. The elements are metallized and precise, however the capacitors are not especially extravagant.

From the company materials we learn, that the M-800A are a scaled down version of the flag monoblocs B-1000f. Just like in the latter, also here the feedback circuitry named ODNF is used – Only Distortion Negative Feedback, where there is no phase compensation or classic feedback loop used in the sound path. Luxman has many patents in this matter, among others the not well regarded, but in that times revolutionary, patent relating to the... Global Negative Feedback for the power amplifier, that it does not use anymore. Nowadays the company uses a new development regarding distortion reduction, that relies on isolating distortion and noise on the output of the device and closing the feedback loop only for the isolated signals. This accounts – as we read – for not influencing the musical signal, and a derivative is the fact, that a DC-servo is not required (and the coupling capacitors are also not there).

Technical data (according to manufacturer):

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|---------------------|---|
| Work class: | class A |
| Output power: | 60W + 60W (8 Ω)/stereo, 120W + 120W (4 Ω)/stereo, 240W (2 Ω), 480W (1 Ω) 240W (8 Ω) bridged mode (monobloc) |
| Input sensitivity: | 773mV/60W (8 Ω); GAIN 29dB |
| Input impedance: | RCA 51k Ω ; XLR 67k Ω |
| THD: | 0.009 % or less (1kHz, 60W/8 Ω); 0.1 % or less (20 Hz – 20 kHz, 60W/8 Ω) |
| Frequency response: | 20Hz-20kHz (+0, - 0.2dB); DC-130kHz (+0, -3.0dB) |
| S/N Ratio: | 117dB |
| Damping factor: | 700/8 Ω |
| Inputs: | line – 1 pair balanced – 1 pair |
| Bridged mode switch | |
| Weight: | 48kg |

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