[English Translation Test Accuphase E-800 / LP 04/2020]

TPH1R306PL

As enigmatic as the headline may seem, it represents just as much what defines the products from Accuphase deep inside. The E-800 integrated amplifier overlord maybe even more than all others.

It's merely five millimeters wide and only three and a half deep, the TPH1R306PL. It has eight tiny connection pins, and there are eight of its kind on the output board of the undoubtedly most impressive integrated amplifier ever created by the company from Yokohama, which has indeed a rich history of impressive integrated amplifiers. Ever means: in the course of 50 years. It's precisely this striking time span on the occasion of which Accuphase releases this monument into the world. 15,500 euros need to be paid for the jubilee amp and I'm going out on a limb now: the E-800 is worth every single damned cent of it.

How can this be? Didn't I recently declare the E-650 the measure of all things in the field of integrated amplifier solutions? Positively. And rightly so. And now this. The E-800 doesn't raise the bar by another bittiness, but noticeably. It's definitely the first integrated amplifier which makes the vast majority of high-class pre/power amp teams obsolete.

The TPH1R306PL plays a part in here. I can't exactly tell how important this part is, but it's there. Comprehensible and provable. Like any evolutionary step the Accuphase engineers grant to their creations. Revolutions rarely happen with Accuphase, evolution is in most cases the dictate of the moment. Why toss over board the insights partly gathered over decades and start from scratch? The ongoing progress, which undeniably exists in the amplifiers from Accuphase, confirms this approach. And so they are justifiably proud when pointing via spreadsheet to the fact that they have raised the signal-to-noise ratio of the device by two decibels. From a guaranteed 102 to 104 decibels. Two decibels in areas which we can confidently classify as inaudible. That's engineering.

The use of the eight TPH1R306s falls precisely under this category. For some time Accuphase has banned electromechanical relays from the output signal path and now uses mosfets exclusively for switching speaker level signals. The damping factor of the E-800, which has been moderately increased, is also due to the fact that the new silicon dwarves of that type … well, you know what I mean … have a slightly lower impedance and a higher current capabilty than those in the previous amps. It's merely one milliohm now – with a whopping 260 amperes of continuous current capability. Incredible what can be housed today on such a tiny piece of silicon. The data sheet of this midget dates from October 2019 and to me it seems wowing how fast such an innovative little thing has been incorporated into a series model by Accuphase.

With an overall height of barely 24 centimeters (9.5“) the E-800 is almost five centimeters higher than the E-650, and this gives it a much more massive appearance. However, a blatant visual aggressiveness is totally strange to it. On the one hand, this is due to the very familiar “integrated amplifier face“ that also adorns the other integrated models from this company. Which also means: a multitude of rarely used controls is tucked away behind a hinged flap. What remains are the input selector switch to the left and the volume control to the right. And an electrically hard, but haptically so smooth power switch. And the gorgeous multi display with analog meter instruments, LED chains and seven-segment LED displays for the set level. So. Exactly like this and not any different, please. Here we feel at home, this is how it's supposed to be.

The E-800 is not a true power giant. And it can't be, for it delivers a large portion of its power in class-A mode. We have measured around 90 watts into eight and 150 watts into four ohms. A good half of them is finest stuff in A-mode. This is not so much more than what the E-650 delivers, likewise the no-load current drain is not so much higher than that of the superseded champion.

And yet: with every fiber of its champagne soul the E-800 appears to be stronger, with a higher torque and greater authority than anything I've ever come across in the field of integrated amplifiers. Hence they must be doing something in a different way than before. Obviously the power amp modules are largely new designs. Which you can already recognize by the fact that twelve instead of six power transistors as in the E-650 are responsible for generating the output power. On-Semi mosfets of the latest generation – sure. With an impressive linearity and such a tremendous power handling that even with two-ohm loads one cannot nearly push them to their limits in this

amplifier. By the way, the E-650 is also fitted with mosfets, but older types from International Rectifier.

Let’s talk about AAVA. As you probably know, this is the unique electronic volume control by Accuphase which avoids all weaknesses of conventional level controls. In principle it’s based on the signal being converted into differently-sized signal currents and only those current portions are added up that are required for the desired level at a given moment. The signal always remains analog, though digital/analog converters are used here. However “the wrong way round“, but I’ve already explained that to you more than once. For the first time this technology is used in the E-800 in a fully balanced version and is consequently called “Balanced AAVA“. Which simply means double circuit complexity, but here, too, Accuphase had their ears very close to the semiconductor market: with parts of the latest generation the entire circuitry was realized in such a compact way that it could be packed into a preamp. The ensemble is controlled by a rotary pulse encoder which has no equal on the market: only for the good feeling Accuphase builds a transmission block into a solid aluminum housing. The main point is that it feels like a top-notch “real“ pot. Eight signal sources may be connected to the E-800: five via unbalanced RCA connectors, three via XLR sockets. These are joined by the two optional slots which can be fitted with the AD-50 phono module and the DAC-50 D/A converter. The special feature about the two new boards is their backward compatibility: they can be used in a lot of topical as well as older Accuphase devices which may easily be 20 years old. Once again something which is done by nobody else. The phono module is the manufacturer’s latest endeavor to come as close as possible to the large external C-37 phono stage using a built-in solution. The board with its primarily discrete layout relies on the same technical approaches and can handle both MM and MC cartridges. The latter are amplified by 66 decibels, the first by 40 decibels. For MCs there are terminating impedances of 30, 100 and 300 ohms available plus there is also a switchable subsonic filter. The pickup adaptation is done via DIP switches on the PC board.

Switching between MM and MC takes place on the front panel, all very nice and practical. The same is true of the D/A converter board that we would like to introduce at least briefly: it offers three inputs (USB, optical, coaxial) and can process PCM signals with up to 384 kHz sampling rate and 32 bit resolution, and it can also handle DSD data. It works with converter chips connected in parallel and a whole lot of other goodies

which are normally reserved for the large Accuphase digital components. The phono module costs 1,010 euros, the converter card 1,260 euros.

Regarding the features list the previous top integrated amplifiers couldn't be topped and are still on early eighties level in this respect, when the big Japanese flagships were undisputedly dominating this market. The E-800 has nothing to add here – what else could it be, the E-650 had already marked the end of the flagpole. So under this aspect you will certainly forgive me for not introducing to you by name once again each and every rotary knob or pushbutton under the massive metal flap.

Let's rather finally take the 79 lbs Accuphase to its intended purpose and plug it into the system, because amazing things are going to happen then:

One can feel it. No joke. Right after turn-on. The huge power supply. The efforts of the power grid to thoroughly magnetize the mighty toroidal mains transformer.Then: the input selector switch. Tighter than it used to be. Good. This suggests discipline. The relays are clicking differently than they used to do. Faster, brighter. Already haptically this is a small sensation: without having produced one single note yet, the E-800 makes it very clear who's bossing the show from now on.

How happy I felt when the ten watts of the single-ended tube amp from Thivan Labs had the Ella, our new Klang + Ton prestige project, so firmly under control. With due respect, here the wish must have been father to the thought somehow. For what the E-800 conjures up from the 8-inch woofer with its elliptical drive is simply unbelievable: Ray Brown's double bass has so much impact, fervor and power that I would never have deemed possible with this chassis – even less so when it needs to fill 90 square meters of space with sound.

I'm brewing my next cup of coffee (hand-filtered, that's understood). And seriously frightened: Romy Madley Croft (the one of "The XX") is standing a few meters beside me singing. Right in the middle of the room, so very naturally. I'm not even close to either of the two speakers – just strike me pink! The sound is brim-full of fervor and liveliness. The jazz project "LA4" has structure, timbre, warmth, and bite. All this from an integrated amplifier? And over the built-in phono stage? AD-50 and Lyra Etna have entered into a wonderfully harmonious marriage, but of course, as Linnenberg's Bizet demonstrates, we can get out even a bit more at this point with a good external phono preamp. However, this doesn't do any harm to the sublime performance of the E-800. Not without good reason Accuphase's company motto reads as follows: "Enrich Life

Through Technology“. Never before has an integrated amplifier solution implemented this approach in such an impressive way.

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