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## **Accuphase Class-A Integrated Amplifier E-600**

### **Golden Times**

By Holger Barske

**As a true aficionado of Accuphase you'll now have to be brave in order to face this: the brand-new integrated flagship E-600 is virtually shaking the foundations of the hi-fi universe.**

Admittedly, I realised this just the other day. And I have likewise overlooked the respective lead in Accuphase's outstandingly informative brochure on the E-600. A glance over the front panel may also not immediately reveal the change. However if you start playing music and the amp is generating just a certain amount of output power then you'll all of a sudden become aware of the fact that some unimaginable things have happened: in the power meters – without question one of the most distinguishing features of integrated amps from Accuphase – two orange LED-bands are quivering about. No meter needles anymore! I remember there were some hefty power amplifiers from this maker which also did without a needle in the power meters. But this necessarily in an integrated amplifier, arguably the most important icon in the product line of this Japanese maker? I would carefully say this is new, but then I'm unable to recall every single of the many, many integrated amps Accuphase has been manufacturing in the past 40 years.

Some dedicated followers of this noble brand may find this shocking in one or the other way, but on the other hand I think the engineers at Yokohama understand their trade in every respect and therefore would hardly affront the potential, convinced clientele for Accuphase: the new power meters come in a very decent appearance because the luminance of the small, rectangular LEDs has been adjusted in a way to avoid any obtrusiveness. Besides that, there is – like in the old days of tape decks – a "peak hold" function, which means, the last LED in the scale is going to extinguish with a delay and thus one can easily read off the momentary peak power.

After this brief and emotional excursion on the new power meter design, let me continue with some further impressions: the E-600 is the new top integrated amplifier and evidently the successor to the E-560. It's also nice to see that the new one is slightly less expensive than its predecessor. Of course, as a true Accuphase machine it has to come along in the indispensable champagne-coloured outfit and with impressive physical dimensions: Such an amp must be 20 cm high and about 25 kg heavy, because otherwise things wouldn't really fit here. And what may sound a bit weird when spotted on the front panels of other amplifiers from various makers is perfectly in order on the front panel of this wonderful machine. It goes like this: "Class-A Precision Integrated Amplifier E-600".

That's right, Class-A! Owing to the concept of using high bias for sonic enhancement, the output power is of course limited. Accuphase specifies 30 Watt into 8 Ohm with correct duplication down to 2-Ohm-loads, and according to Accuphase even a 1-Ohm-load could be managed without problems. Our lab however reports some alternative measured values, namely 60 Watt into 8 and a good 100 Watt into 4 Ohm. Having employed Class-A also means to allow an increased power consumption which in case of the E-600 is 160 Watt during idle operation. This speaks for Class-A-operation over a wide range of modulation, yet the amplifier will eventually switch to Class-B mode.

The E-600 conveys the comforting security of a bomb-proof command centre. In order to cope with this pretension its maker has donated all the functions and features that make an excellent integrated amplifier: six unbalanced (RCA; one configured as tape-loop) and two balanced inputs (XLR). Then we find connector jacks for preamp output and amplifier input, whereby both are likewise available in balanced and unbalanced configuration. Last but not least we have two sets (A/B) of very solid speaker terminals, which can be switched of course. Like Accuphase's other integrated amps (and pre-amplifiers) the E-600 is equipped with two so-called "option board installation slots" at its rear panel. The purpose is to expand the inputs of the pre-amp stage according to one's specific needs. For its top-integrated Accuphase can offer the following boards: digital input board *DAC-40*, analogue disc (vinyl!) input board *AD-30* and line input board *Line-10*.

In spite of its complexity: those of you who in the seventies and eighties had already been dealing with big integrated amplifiers will easily get accustomed to the E-600, and – mark my words – will have a lot of fun, too. The reason is that there are simply no half measures or shortcomings. This amp in its diversity does all it is requested to do with stunning precision. Nothing gets stuck, nothing crackles. Each switch, button or knob is exactly doing the job it has been made for. In all fairness I must add however that this excellence I also encountered not long ago in the "entry-level" E-260. But that's Accuphase as its best!

Volume is adjusted with an unbelievably smooth feeling via the unique rotary knob on the right. The mechanics behind this knob have recently been refined and I consider it a good example for the extreme efforts the Japanese have taken even for seemingly incidental details. Tone controls? You bet! And they are switchable, of course. The power meters and the numeric display (dB) for volume level may be switched off separately so that in the end there is merely the decently green Accuphase logo and an LED still being lit. For the first time one will discover a LED dubbed "USB" among the function LED indicators. It's for the new DAC-40 option board which comes equipped with a USB input.

As to other technological aspects, Accuphase has once again gone through a gentle evolution. The AAVA volume control – tried and tested for quite a few years now – has been upgraded in so far that certain components of the circuitry have been doubled in parallel configuration in order to achieve a still better signal-to-noise ratio. This extremely elaborate circuitry divides the input signal into multiple weighted currents whereby in the next step the currents are added again according to the position of the volume knob. Well, as far as I know, to this date no other audio manufacturer has dared to cope with this task. In the power stage there are 2 x 3

MOS-FETs per channel, yet I'm going to spare you the details regarding the current-feedback technology Accuphase is employing at this stage. It's however interesting to see that there are no more relays at the output. Accuphase has replaced them by MOS-FET-switches which are absolutely wear-free and resistant against long-term pollution. With respect to the chapter "Loving Attention to Detail" I've got one more: the chokes at the speaker outputs are no longer simple wire-wound coils, but edgewise-wound air-core coils made of solid flat copper. Well, this detail may not be decisive for the outcome of the war but is another evidence for me that at Yokohama there is nothing made unconsciously "just like that". In the 35 years I have been involved in hi-fi I have never encountered such an elaborate choke at this spot. And it's these "bits and bobs" that really get me hooked!

Now, what about the sound? The moderate output power should not confuse you. It's because during my extended listening tests I never had the slightest reason to think the E-600 is going to be dynamically exhausted. No, this amp can indeed build up very fine sonic sculptures on a black, very strong foundation and in front of a completely dark and silent background. We listen to the new album from Dillon, "*The Unknown*": it takes the E-600 just about three beats to fascinate everyone who's not a devotee of very special "sonic ideals". The song begins with a most powerful and warm intro of the bass and then explodes with the first vocals of Dillon who is standing in the room in front of us in an incredibly perfect focus. The E-600 does not generate a sonic picture which one has to get accustomed to over the time. It's utterly convincing right from the very first tones, yet I trust one can definitely expect this from an amp in this price class.

Not to forget: the phono module AD-30 does a great job and played in perfect harmony with Lyra's new "*Etna*" cartridge. Perhaps an external solution might have extracted a tad more dynamic shades from this Japanese volcano, but that would never have been at a reasonable rate with respect to the additional financial expenses. Also quite remarkable: rumours have it that Avalon speakers are not so easy to drive. Well, we happened to have the Avalon "*Idea*" in for testing and it turned out that the E-600 is indeed the perfect partner for these speakers. In particular in the basses this combination rendered such power and precision that left nothing more to be desired. And to where else I listened during my musical journey with the E-600 there was nothing I thought could be better still. No, it simply can't get any better than that!

### **Summary**

With respect to integrated amplifiers Accuphase has definitely set the benchmarks! The new E-600 is perfect as to functions and features and in addition delivers a perfect composition of sonority, resolution and power.