## Power Amplifier Accuphase P-5000

## **Rational Arguments**

by Holger Barske

Something's going on in the best known of Japan's champagne wine cellars: Accuphase have completed their line of power amplifiers by launching the P-5000.

They owe it to themselves, those busy engineers from Yokohama: in the beginning of this year they gave us merely their second biggest pre-amplifier for testing (STEREO/January 04), namely the C-2400, yet they could completely sweep the board. Although it cannot be called a bargain but when compared to some other high-calibres at the end of the flagpole it remains more or less affordable and, behold, this preamp definitely hit the spot in the midst of our own reference devices! In our search for a suitable amplifying partner we came across the mighty P-7000 and eventually this combination worked very well indeed, except that the P-7000 is certainly far beyond the price frame of the C-2400. An adequate amp with a similar price tag from Accuphase was unfortunately not available at that time but can now be spotted on the shelves of appointed Accuphase-dealers, namely the P-5000. The question however remains as to how much of the C-2400's immense quality can be transferred through this supposedly "subordinate" new amplifier model.

In view of the fact that the P-5000 is meant to be a somewhat smaller edition of the P-7000 yet also blessed with the latest innovations created by Accuphase we can assume that the P-5000 might be nearly on par with the P-7000. As we already know Accuphase have been, in fact for quite some years now, employing the principles of current feedback circuitry in their amplifiers. And this makes sense indeed: in many cases, currents are much easier to deal with than voltages and less subject to trouble anyway. For example, in order to summing up or subtract two or more voltages one needs to design quite an elaborate circuitry. In opposition to this, currents are simply routed to a central current adder and, well, that's it. This trick is used by Accuphase in their own so-called Multiple Circuit Summing-up (MCS) input stage where two times three parallel circuits are collecting their output signals "in one pot". The results are extremely low noises and hardly any distortions - see the respective lab-report elsewhere in these pages.

At the end of the compact amplifier modules, which -typical for Accuphase- have been tightly fixed onto heat sinks we find six bipolar transistors per half-wave in parallel configuration. Expressed in plain numbers this is only half of what the P-7000 can offer yet we consider the output power being gigantic still. Just for fun we tried, by switch, the optional bridged mode of operation in our lab and measured a stable 924 Watts into 4 Ohms -incredible! Also, the other performance parameters we measured did in every case top the traditionally conservative specs published by Accuphase. To wit: nearly 300 Watts of continuous output power into 4 Ohms is a good one third more than the glossy and informative brochure is promising.

In order to have the necessary energy ready when needed this amp features a massive toroidal power transformer with a maximum rating of 1 kVA as well as two beer can sized electrolytic capacitors. The transformer itself is housed in a vibration-absorbing, neoprene-

like material. Needless to say that these properties can be considered sufficient, in particular with respect to the fact that the P-5000 is in no way a "Bias-Monster", i.e. wasting energy while in idle. Indeed, power consumption from the mains is a mere 65 Watts when there is no input signal, thus making things quite economical.

This makes also clear that the heat dissipation could go inside the case, unlike the P-7000 where the mighty heat sinks are a visually dominating element. Also, the speaker terminals at the rear panel are of a somewhat smaller size when compared to the "mind-blowing vices" of the bigger brother. However they are nevertheless of outstanding quality and besides that do accept banana plugs which the "big ones" don't.

Power indicators? Of course, because without these decently illuminated meters it would certainly not be a genuine amp from Accuphase. Yet in defence of the usually not so precise meter technology, it ought to be said that Accuphase have employed meters as well as a polished control circuitry that can be trusted without hesitation.

What we did not quite expect was the fact that in our listening room the P-5000 unveiled a slightly different sonic character than its bigger brother P-7000. It can deliver an incredibly compact, yet well-rounded and quiet sonic picture whilst rather preferring the pastel colours from the paintbox. Well, the C-2400, which is meant to complement the P-5000, is in fact doing the same. Hence this combination is an excellent match which can deliver an overwhelming "Feels-so-good" sonic picture.

Genuine dynamic can be noticed through the lack of spectacular effects and this is exactly the domain or the strong point of the P-5000. It is drawing bass lines with splendid precision and variety while at the same time showing a little preference of the upper bass registers. As far as the rendition of trebles is concerned there is nothing but an absolutely perfect balance. Neither the slightest trace of exaggerated brilliance nor any musical restraints are spoiling the picture. By the way, with respect to the rendition of basses the P-7000 is of course playing in the same league except that it seemed a tad more slender than the new one. Overall, the latter does deliver a higher measure of sonic structures and speed but then it is also more expensive, isn't it?

In this price region however it may, nay, must do that. But as the P-5000 could amply convey there is nothing to improve regarding the wonderfully smooth rendition of voices as in this respect it is definitely on par with the big one. It is also quite disciplined when it comes to soundstaging: gigantic sonic dimensions are certainly not in the P-5000's preference but for instance on a small stage it managed to pinpoint each instrument in all their dimensions in an outstanding way. The P-5000 is indeed a brilliant high-power amplifier which however does not show off its potency right away but rather knows where to use it in the right spot. A really successful addition to the C-2400 because all the great virtues of this reference pre-amp are fully passed through by the P-5000. This is what we call reason at high level.