

## **Accuphase Integrated Amplifier E-250**

by Johannes Maier

### **The Little Prince**

**With the E-250 Accuphase is presenting the new integrated youngster. Explosive power may not be expected by hi-fi fans, but perhaps all the more a sterling sound?**

Actually, the new amp from Accuphase should not merely be called E-250 but should rather be decorated - next to its type designation - with a title of nobility. After all, which other integrated amplifier can proudly look back onto such an impressive gallery of ancestral portraits, i.e. from the vintage E-202 of 1975 via -203, -205, -206, -210, -211, -212 till E-213, which was reviewed in *Stereoplay* July 2005. Consequently, the E-250's manner of appearance is rather conservative. The customary meters on the front panel will always tell you the transferred power by their majestically waving indicators. And once again, this Accuphase amp will have faith in every knowing and experienced audiophile to make responsible use of the loudness compensator, tone controls and tape monitor switch provided. It's nice to see that - like in the past - one can choose between speaker output A and B, which are to be connected to some hefty terminals. It's also prime to have the input selector knob engaging altogether six high-level inputs plus an additional input to be realised by two alternative boards optionally available from Accuphase as DAC-20 or AD-20 for vinyl aficionados.

Last but not least, the new Accuphase can be connected to a CD player via a dedicated XLR input, yet not necessarily so, because the signal becomes unbalanced right after the input, whereby at this spot some common amplifier ICs are used rather than the more sophisticated, special instrumentation amps employed in its bigger brothers.

On the other hand, much more than by history and features, the E-250 is to excel by its electronic volume control now dubbed AAVA-II (see insert "Loud and Wise") which can also be found in the preamplifier C-2110. Quite unlike conventional methods of volume control this one was made to refrain from decreasing the signal-to-noise ratio and hence the dynamics in music. And whilst one could consider the previous AAVA circuitries providing more or less a grave for ICs, Accuphase managed to straighten the circuitry layout in the E-250.

Strong input amplifiers, custom-made precision metal-film resistors with odd values as well as an array of meticulously operating switching ICs: a certain complexity is evident yet this complexity seems to remain within reason. Well, perhaps only so far that in the foreseeable future similar circuitries might appear in the amplifiers of various competitors. We at *Stereoplay* could make a bet on that!

Owing to the solid preparatory work of the AAVA-II circuitry, a dual-construction of the input circuits for the power section, as can still be found in the predecessor E-213, does no longer make sense. Instead, Accuphase has

implemented an even more elaborate layout of current feedback. Now, before this feedback is to take corrective action in the input circuit, a specially processed portion of the input signal is added. Indeed a technical delicacy from which an engineer can easily read out the possibilities of a particularly subtle optimisation with respect to distortions.

### **Loud and Wise**

We at *Stereoplay* have already marvelled at the IC-loaded AAVA (Accuphase Analog Vari-gain Amplifier) in the preamplifier C-2110 (issue 09/2008), yet the slimmer electronic volume control in the E-250 seems even more attractive. The input amplifier - equipped with pretty strong transistors - is augmenting the signals in so far that an array of altogether 144 precision resistors can call up a variety of current bits. The listening volume is adjusted by a combination of 16 voltage-current converters. The number of possible volume steps is  $2^{16} = 65,536$ , as determined by current switches, whereupon the music signal is converted from a voltage into a current, to allow control by current switches, and then back into a voltage. The entire process is carried out in the analogue domain. The electronic circuitry employs only fixed-value resistors and hence there is virtually no left/right tracking error, also at low volume levels. Crosstalk, too, is not an issue here. Lastly, the unique AAVA-II does not induce any changes in impedance and there is no alteration of frequency response.

We connected the E-250 to the "Vescova" speakers from Isophon (reviewed in issue 08/2008) and right after the first beats the entire listening panel got immediately thrilled by the warm and extremely vivid aura the E-250 was able to convey. We were downright hypnotised by the wonderfully driving, vibrant rhythm, whilst this amp was willingly showing us how a drummer was pushing his band with peppery, dry bangs on the snare and coal-black hits on the bass drum. However the E-250 never sounded uncomfortable. Lesser amps might have been misled to sound like rumble here, yet through the Accuphase everything remained in a complete musical context.

Also no airs and graces when it came to spatial rendition: the deep soundstage starts right at the speakers whereby instruments and voices are positioned with focus and three-dimensionality. Some songs from Kari Bremnes' new album "LY" (Indigo CD) are describing landscapes and a wide open sky. Including some fine highlights on the percussion, the E-250 is capable of displaying that with joy and at the same time is maintaining the seriousness and sweetness in the songs of the woman from Norway.

We soon realized that the new integrated Accuphase plays in a different league when compared to the E-213, which can still be considered a very good amp. It's because when the latter had to deal with complex passages in music, it did react with a certain anxiety and occupied voices with a kind of raspy tone. Not so the E-250 which was taking a deep breath and kept playing along with its relaxed, sublime temper.

Yes, the Unison Research "Unico 100" (issue 11/2008) from Italy delivers somewhat more bass and the Pathos "Logos" (issue 12/2005) from the same country is a bit more resolving in the highest frequencies. However in the long run our little prince is definitely the more charming musician and that's why we rewarded it with 56 sonic points - plus *Stereoplay's* "Highlight" crown.