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## **Test Accuphase E-470**

## Your Majesty

The E-470 is the biggest class A/B integrated amplifier made by Accuphase – a majestic appearance. Will it come up with a royal sound as well?

It's been a long, long time. Back in early 1990 a busy loudspeaker designer showed up with his first creations at the hi-fi shop where I was working during my course of studies, aiming to convince the specialist retailers of his products. Visually I really liked the perfectly crafted speakers in their plain guise. To find out about their acoustical virtues, they were connected to just about anything of distinction in that high-end demo studio – among others, to the mighty C280L / M1000 pre and power amp combo from Accuphase. In all my life I will never forget what was happening then. The music became completely detached from the speakers, the sound was totally natural, and the room which the tandem amps unfolded was overwhelming – deep, wide and utterly precise. This performance never slipped from my mind. I stayed in touch with the loudspeaker designer, we even became friends, and until today I've been using creations from his manufacture.

Now, what has this got to do with the Accuphase E-470? Some time ago I already informed the editorial staff about my wish that I'd finally love to review an Accuphase amplifier myself, because I was curious to see if the sound experience of the past could be repeated. My plea was answered and I was given permission to live with E-470, the integrated class A/B flagship amp of the Japanese, for a prolonged period of time and can now write about my impressions.

Since the 1980s the myth has haunted through the high-end scene that a truly paramount amplifier must be void of any technical features. On-button, source selector and volume control – more knobs should not decorate any amplifier front. Features cost money and thus deprive the designer of his budget which he so desperately needs for huge power supplies and soundwise outstanding components. I must admit that I also used to be an enthusiastic advocate of this theory, namely for two reasons. First of all, I used to like elegant, minimalist designs, and this is true until the very day. Secondly I was on a very tight budget and definitely wanted to get the ultimate sonic maximum from each invested Deutschmark. Even back then the Accuphase makers only shook their heads about such a theory and still do so. A pre or integrated amplifier is the command center of each hi-fi chain and according to the Japanese should – in addition to switching the source devices – also be able to compensate minor problems of the sources, the room or the speaker placement. For let's be straight: how many of us can build and design a living-room around their

equipment? The groundplan is predefined as is the purpose, nor should we simply brush aside the aesthetical wishes of the best-ever significant other. In this situation a little more or less treble, a soft bass attenuation or the correction of volume imbalances can produce some very good effects. Purism is a nice thing, sure, but which high-end lover gets upset about the fact that his favorite music was mixed down on a large mixing console with hundreds of switches and rotary controls? You nailed it – no one.

When I look today at an Accuphase E-303X from 1983, the front panel littered with knobs, switches and power meters has nothing to do with unpretentious elegance, but is rather reminiscent of a boiled down mixing desk. And what sort of amplifiers do the Japanese build today? After unpacking the E-470 I was really surprised: This integrated amplifier complies entirely with my stylistic preferences. The center of its massive aluminum front panel anodized in champagne gold is marked by the two VU meters typical of Accuphase and a digital volume display which glows in a beautiful red, flanked by a rotary source selector and a volume control. The various controls and knobs, which define the feature list of the E-470, remain hidden behind the cover lid underneath. Hereby this front exudes an absolute tastefulness and high-class flair. And as usual the E-470 shines with features aplenty. It offers five unbalanced and two balanced inputs plus a full-value tape loop including tape monitor option. Those who feel this still won't cut it can push two additional line cards into two extra slots (but those are preferably designed for an optional DAC or phono module). Here we can witness once again the perfectionism of the Accuphase engineers, for the activation of these inputs and the change from MM to MC on the phono module are comfortably done with the pushbuttons behind the lid - definitely a well thought out concept. Of course, the E-470 is also equipped with tone and balance controls, a loudness compensation as well as a level attenuator all of which can be neatly switched out of the signal path using relays. A really good headphone connection plus the option to split the pre and power amp sections round off the sumptuous feature list.

Another point which also impresses me about the Accuphase E-470 is the haptic sensation. This begins already when taking the integrated amplifier out of its packaging and placing it on the rack, and it pleases with each operation. The workmanship is simply perfect with nicely rounded edges, minimal and accurate clearances plus accurately mounted switches, pushbuttons, rotary controls and connectors. This amplifier was trimmed to elegance – it's a downright beauty. Period.

This splendor is found to continue seamlessly on the inside. A massive and humfree transformer with a decent filtering capacity is not a bad start for an integrated amplifier of this power category. And the E-470 delivers plenty of power, 212 watts into 8 ohms are quite a statement (in a conservatively reserved manner Accuphase specifies 180 watts). Large heatsinks with the flanged-on power amp modules flank the power supply. The switching mimic in the stern of the amplifier and the preamp section with the volume control directly behind the front panel bear witness to electronic design at its best. Talking of volume control: with the circuit called AAVA – a current/voltage converter with almost 65,000 different levels that was launched several years ago – Accuphase created a brilliant masterpiece. For this circuit

allowed to bring down the channel deviation near zero and shift the distortion level of the entire preamp section into a range that is barely measurable anymore. Now one might assume this circuit is so perfect that the engineers wouldn't have to touch anything here. But the opposite is true. Accuphase has been working flat out on a further optimization of the AAVA circuit aiming to reduce the distortion level even further — and, compared to its predecessor, the developer team was indeed successful once again. Some amp designers juggle with distortions very purposefully in order to generate a certain sound, yet the Japanese strictly object to such things. Their credo is: the lower the distortions, the better the sound. With the power amp they equally succeeded in minimizing the output resistances through a modified circuit topology, thereby increasing the damping factor of the forerunner by the factor of 2.5.

So what do all those efforts mean for the sound? And above all: will the »big Accuphase« be able to conjure a smile on my face when I'm listening to it? But before we can hear the first serious tones the E-470 is wired by HMS cables to mains. its fellow players and the loudspeakers and is granted a 24 hour warm-up phase while sucking from the green energy. Then at the first notes that reach my ears it becomes obvious that something magical is happening here. It's the utter naturalness with which the music comes across that's thrilling me. This is really hard to put into words, for it is a very subtle process by which the musical performance is capturing my imagination. In the classic hi-fi criteria the verdict is easier: the bass of the E-470 is simply clean, contoured, deep and mighty, without playing itself into the foreground. A plucked double bass is not only reproduced perfectly with regard to tonality, but also the position in the recording room and its size are always reflected accurately. The mids are a peerless dream: male voices are pictured perfectly in their volume. They are not covered by low registers either, but always stand as prominently in the room as they were recorded. The highs sound smooth, yet absolutely precise and are never drowned out in the music, the resolution is definitely superb. I never had the feeling that something might be missing. Here it shows very clearly that the Accuphase credo of minimum distortions works, because in the E-470 no distortions fake a high-frequency resolution where there is no such thing.

Another example of the quasi absence of distortions in the E-470 is its behavior at low volume levels. Because even then the generous room remains the same – there is no shrinkage in depth or width or a dwindling imaging precision. Voices are not masked by other bodies of sound, either. At low listening volumes the AAVA seems to be unbeatable.

But the E-470 is far from being a softie. Once again I took my Yello records out of the cabinet. »La Habanera« (on »One Second«) and »Vicious Games« (on »Stella«) take off like a rocket: driving, involving and bringing enormous fun. On »Fanfare For The Common Man« from the »Works« epos by Emerson, Lake & Palmer the fanfares also burst from the depth of the room like out of nowhere.

Sting's »Englishman In New York« (from the album »... Nothing Like The Sun«) shows in an exemplary way how the Accuphase deals with voices. No matter if loud or soft, the shades of Sting's vocals are always reproduced in perfection.

For his album »Graceland« from 1986 Paul Simon had secured himself, among others, the participation of a South African a capella group named Ladysmith Black Mambazo. Their album »Shaka Zulu« has been in my possession for many years, and it was also this music which I had listened to during the loudspeaker test mentioned at the beginning. Now I put on this record once again, and the acoustic experience via the E-470 was dramatic. I got goose bumps and a chill was running down my spine. My chain had vanished, the ten boys were standing in my flat singing their hearts out. With »At Golgotha« I could assign a definite place to each singer and also precisely recognize the most subtle differences between the pitches. The whole sound experience was simply indescribable. That's the way high-end audio is supposed to sound in your own four walls.

Bottom line: the Accuphase E-470 is an integrated class A/B amplifier which has been developed and built to perfection by music addicted engineers. It offers plenty of power and a comprehensive feature package, it is impeccably crafted and shines with its plain elegance. In all honesty: the Accuphase E-470 belongs to the very best one can possibly get in the field of integrated amplifiers at this price tag. With regard to sound quality, it proved to be invincible in my system configuration.

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