Accuphase Stereo Phono Amplifier C-27

by Dirk Sommer

Which dedicated follower of analogue music reproduction would have ever dreamed of this 20 years ago? The Japanese noble maker Accuphase is for the first time presenting a separate, extremely elaborate phono/equalizerpreamplifier. It was in the end of the year 2001, during the celebrations for the 25th anniversary of P.I.A. [the Accuphase distributor in Germany], in a time when many, in particular U.S. high-end manufacturers have put an emphasis on home cinema – no longer a big issue today, eh? – when also Saito-San, in his capacity as Vice-President of Accuphase, unreservedly stood up for the two-channel stereo rendition of music. How serious this commitment was meant is, amongst other things, documented by the analogue tuner T-1000, which was to receive an image hifi award, and the stunning CD player DP-500. Accuphase actually never bothered about alleged future trends but rather had faith in those audiophiles who would like to acquire the very best component for the playback of the currently widespread formats and media – and, yes, Accuphase succeeded.
To this date analogue aficionados had a choice among various phono boards to suit their preamplifiers or integrated amps from Accuphase. Now this maker is trying to meet the ever so growing demands of vinyl lovers with sophisticated audio components at home by launching a phono/equalizer-preamplifier which is capable of processing the signals of up to three pickup cartridges, whereby it doesn't matter if the cartridge is of the moving-magnet or moving-coil variety. Each input can be configured accordingly. Yet this is not carried out by simply switching an additional amplification stage in the signal path on or off, like is the case with nearly any other
competitive phono preamplifier. No way, in the C-27 Accuphase allows itself the luxury of providing two independent amplification stages, one completely optimised for MM, the other one for MC.

Moving-magnet pickups generate an output voltage which is about ten times higher than the output voltage of a "normal" moving-coil pickup and they are usually designed for a load impedance of 47 kOhm. Therefore, three FET buffer amplifiers (x2) with high input impedance, arranged in parallel configuration, are taking care of the incoming signal before it is handed over to six likewise parallel-configured differential amplifiers in a push-pull circuitry. In addition to the standard 47 kOhm, this amplifier stage also offers a load impedance of 1 kOhm and 100 kOhm, which is activated by relays and accordingly selected by means of a rotary knob on the front panel. The substantially weaker MC-signals are boosted via eight parallel differential amplifiers in order to ensure a low load impedance as well as an extremely high signal-to-noise ratio which is oh so important for the operation of pickups with movingcoil technology. Load impedance can conveniently be selected, again by means of a rotary knob, whereby 3, 10, 30, 100, 300 and lastly 1000 Ohm are provided for experimentation. For each amplifier section, the gain can be augmented by 10 dB and then a subsonic filter can be activated by simply pressing a button. It goes without saying that the C-27 also features a memory facility for load impedance, overall gain, subsonic filter and, last but not least, MC- respectively MM-mode of operation. All this can be programmed for each input. The MM- and MC-amplifier of each channel share one circuit board made of Teflon which is said to have a low dielectric constant as well as low loss. The two boards for left and right channel are mounted above each other and supplied with energy by separate encapsulated toroidal power transformers with downstream stabilisation. The output signal is available at both RCA and balanced XLR connectors for each channel. Fortunately, you need no longer worry about the correct polarity of the balanced output signal and, if necessary, to have the phase eventual inverted at the preamplifier. It's because by means of a slide switch on the rear panel one can select if pin 2 or pin 3 of the XLR socket is to conduct the "hot" signal. The fine electronic circuitry is embedded in an elegant cabinet with a champagnecoloured front and the side panels made from precious wood, whereby the entire artwork stands on special resonance-absorbing feet. Something one can actually take for granted if made by Accuphase.

Upon my first encounter with the C-27 I considered the possibility of testing its MM stage utterly fascinating. Though not with an MM pickup but with Ortofon's SPU in combination with the silver-wired step-up transformer Ortofon T-100. This was due to the fact that my own phono/equalizer-preamp from Einstein would only accept the tiny signals from moving-coils and thus excluding whichever experiment with step-up transformers anyway. The suitable settings in the C-27 are quickly engaged: input 1 is

switched to MM, subsonic filter switched off and the additional gain activated. As to the load impedance, I switched between 47 kOhm and 100 kOhm during the listening session. With the old Contemporary-Mono-LP Shelly Manne & His Men Play “Peter Gunn” (C 3560) the higher load impedance yielded a tad more openness and sheen in the sound picture. However the irresistible swing of this old but still fascinatingrecord was conveyed by SPU, T-100 and C-27 independent from the load setting in the latter. Although I had to turn up the volume knob of my Brinkmann Marconi [preamplifier] more than I usually do in order to get to a more exciting playback level, there was absolutely no noise from the speakers spoiling the calmness in my listening room when I lifted the tone arm for changing records. Owing to the exemplary signal-to-noise ratio of the C-27 as well as to its unconstrained and emotionally appealing way of playing you get bewitched by the charm of the SPU
Royal after only a few beats. A small portion of more intensity can still be wormed out of this classic pickup when the Accuphase takes its signals directly in MC mode, i.e. without the detour through the T-100: now the musicians seem to groove along with stronger devotion,
the instruments sound more sophisticated and pulses have more impact. After a short time of listening you have simply forgotten how old this recording actually is, while you are carried away by enthralling rhythms and pleasing melodies. In the end I thought to myself that I should more often search my vinyl archive for old treasures and also have the SPU wakened up for doing the tracking from time to time.
Yet in the first place, we are talking about the C-27 here, which is currently working in “high gain” mode of operation and loading the SPU with 100 Ohm. When I switched to 30 Ohm the playback level was significantly lower so I went back to 100 Ohm again. In this configuration I did not need to turn up the volume knob on the Marconi as far as with the C-27 being in MM mode and the T-100 loading the SPU. Although the Accuphase without step-up transformer had to accomplish an additional gain of 30 dB, some low noise was audible only during playback intervals and my ears in close proximity to the tweeters. Evidently, the engineers at Accuphase have once again done an excellent job here! Ultimately, it’s the sound that counts, and which ought to be ideally assessed by comparison, for instance with my fully balanced phono/equalizer from Einstein. Once again after a long time Chuck Maggione’s Children of Sanchez came to rest on
the platter of the Brinkmann LaGrange. The dynamic overture with its opulent instrumentation was really thrilling, no matter which of the two phono stages took over the amplification. Through the Einstein and balanced tone arm leads from Precision Interface Technology it altogether sounded a bit more analytical and a tad too chilly than through the Accuphase and leads from Ortofon. I have usually a large selection of tone arm leads from various makers at hand, but unfortunately not the balanced and unbalanced variety of the same maker. Therefore I cannot say for sure as to whether the audibly perceived differences are on the respective phono stages or rather the leads. It’s however safe to say that the purist Einstein and the opulently equipped Accuphase are both playing at the same extremely high level, even if there are marginal differences audible, which eventually may be a matter of personal taste and preferences also.

What has been said above can be applied on the condition that – like with the Einstein phono stage – the output signal of the C-27 is sent to the preamplifier in balanced mode. Now, unlike the Einstein, the Accuphase also offers the possibility of signal transfer via unbalanced output jacks and interconnects. Well, in this respect I can make some definite statements because I happen to own balanced as well as unbalanced interconnects from the same type and maker. For this specific comparison I allowed myself a different tone arm/cartridge combination: the dedicated position on the LaGrange for 12-inch tone arms was taken over by the Brinkmann 12.1. arm to which I mounted the quite expensive (from an absolute point of view) Air Tight PC-3 cartridge, yet which nevertheless offers excellent value for money and is ideally loaded with 100 Ohm. To wit: luminous sound colours, the wonderful transparency and effortless rendition of pulses made the Discovery reissue of Oregon’s Out of the Woods a joy to listen to all the way across Side A, during which the PC-3 could also flourish again after a long time of rest. With “Waterwheel”, my favourite piece on Side B, the audible differences between balanced and unbalanced connection from C-27 to the Marconi preamp were very small indeed: through the RCA interconnects the sonic picture was a wee bit more crisp and vivid and in the high frequencies a trace more gleaming still. Yet I should rather verify this first impression by playing one of the “test records” I’m most familiar with. So, Dick Schory’s Percussion Spectacle makes soon clear that by means of XLR interconnects there are simply more of the minute soundstage information transferred to the preamplifier than via the RCA jacks. I assume that the hint more sheen I heard in unbalanced mode might well be attributed to the valves in the

phase inverter stage of the Marconi. So I kept the balanced leads connected for the next records I was going to listen to. After two pickup cartridges with rather low internal resistance I went to confront the input of the C-27 with the Da Vinci [by Clearaudio] of which the gold-wired coils have an impedance above 30 Ohm. For this cartridge I preferred a load impedance of 300 Ohm rather than 1000 Ohm, because the first setting created the illusion of a deeper, more 3-dimensional soundstage whereas with the latter load the sonic portrait took more centre stage. Differentiation, the love for details and utter dynamics were exactly as one would have expected from the Da Vinci in combination with highclass phono stages.

Summing up, the Accuphase C-27 was made to drive any pickup cartridge to itsmaximum performance. From this point of view it's actually a great pity that we all had to wait for this world-class phono amplifier until the end of 2008.