

Accuphase CD Player DP-400

Nobel Prize

by Lothar Brandt

It comes in as noble appearance because it's a direct descendant of a noble house. It is adjuvant because it is good for a digital control centre. How good it really is has to be resolved, though. The least expensive CD player of the Accuphase family is preparing itself for an exclusive review in AUDIO.

Such a reputation is certainly not acquired easily. "We must get it for the next issue" was the unanimous agreement among us - without having heard a single tone yet - when we got wind of the DP-400's existence before it was to be launched to the public. Which led to a nearly conspiratorial express delivery in order to have AUDIO presenting, in the here and now, the brand-new and least expensive CD player in the portfolio of the Japanese noble maker.

Take it or leave it: we consider the price tag not being a bargain, though. In particular for a CD player which at the first sight plays nothing but the "antique" CD format, from a today's point of view, that is. So, how come AUDIO dares to announce "Super Price" on its cover? It's because our testers examined and, above all, auditioned the DP-400 more than once. Like its discontinued predecessor DP-57, the newcomer also offers digital inputs. The internal DAC of the "Multiple Delta-Sigma" type was made to process various digital sources, too. Network players of all kind and price classes are invited to dock to the co-axial input for sonic improvement. Those notoriously hum-loop endangered satellite tuners may use the optical Toslink input instead in order to avoid any tedious ambient noise. At first, the network option seemed a bit weird to me because it somehow wasn't typically Accuphase. But then it was soon to open my eyes.

My colleague Bernhard Rietschel proceeded to dock the Sonos (see page 54) and owing to the DP-400's nearly loss-less digital volume control he connected the latter directly to Audionet's MAX power amplifiers. Well, the transformation of the DP-400 into converter/preamplifier/player could not only outclass the DAC inside the Sonos but pushed all the incoming musical signals to unexpected sonic heights. When - just for fun - Rietschel tuned in the web-radio station "Otto's Opera House" I thought I couldn't trust my ears as to how wonderfully magic Humperdinck's opera "Hänsel & Gretel" sounded with all its colours, power and depth. Simply stunning how the DP-400 could refine the data-reduced food.

In my opinion the converter section of the DP-400 is simply too good to be exclusively supplied by its own tried and tested, solid CD transport we know from its bigger brother DP-500. Although the processor - which Accuphase dubbed "MDS++" - has to get along with merely two instead of four DACs of the PCM 1796 type, these chips from Burr-Brown (taken over by Texas Instruments in the meantime) are employed in a similar way. The wafers are good enough for a sampling rate up to 192 kHz / 24 bit in pure stereo operation. Accuphase has implemented them in

parallel configuration - hence "multiple" - and tapped each the phase-correct and phase-inverted signal. After a current-to-voltage conversion the voltages from both paths are added - hence "Sigma" (the mathematic sign for sum). Eventually, the phase-correct and phase-inverted currents are subtracted in the output stage - hence "Delta" (the mathematic sign for difference). All the investment Accuphase put into "Multiple Delta Sigma" is said to rigorously reduce converter errors and eventually lead to more precision and dynamic rendition as well as to distinctly lower noise and distortion.

And this is what's really going on! Our lab has reported sensationally low values at the measuring threshold for signal-to-noise ratio and distortion. Jitter, too, is beyond good and evil and hence there is no reason to be afraid of any roughened sound caused by the dreaded digital clock jitter. This noble Japanese however did not like if CDs showed scratches or smear. In particular when the wedges on our test CD were wider than 1.3 mm the DP-400 reacted with drop-outs. On the other hand, who can imagine an Accuphase owner stockpiling messy CDs in his collection?

For that the silver disks are simply sounding too good with the DP-400. Right away the newcomer seemed to be on par with its bigger brother DP-500, which without any doubt can be considered one of the best integrated CD player on this planet. In order to still hear any difference at all within this unobtrusive, neutral, airy-transparent and fascinatingly dynamic flood of sound we had to reach for the finest surgical scalpels: the two Accuphase players - output level fully up - were docked to the in-house super preamplifier C-2810 (reviewed in AUDIO 09/06) at the latter's balanced high-level inputs via the top XLR interconnects KS 1136 from Kimber. Audionet's MAX were driving the unerring KEF Reference 207/2 speakers. Yet even when auditioned through this top audio chain, the "little one" did not let itself get shaken off. TACET's highly audiophile production of String Quartets by Josef Haydn was rendered by both players as if it was the most natural thing in the world, i.e. with artfully differentiated sound colours and a precisely illuminated soundstage. With the rather rustic and ping-pong-stereo-recorded "Forever Changes" by the band Love (Oldie-CD of the month 07/08) one could distinctly perceive each single whirr of acoustic guitar strings and each snare beat from the drummer. During the extensive listening session, juryman Rietschel in particular conceded a tad more punch and deeper sound colours in favour of the more expensive Accuphase.

Lots of hard rock, orchestra bangs, piano impacts and female voices later Rietschel however agreed with the other testers: if the DP-500 may add a big plus to its 125 sonic points, then the DP-400 is nonetheless coming very, very close to this dream score. The smallest Accuphase CD player, too, lives up to its reputation.

SUMMING UP

I've already taken the youngest Accuphase-baby to my heart. Of course, it does sound better when connected to a top preamplifier than without. And it's definitely boosting the best of its qualities when self-supplied by CDs. On the other hand, it can really demonstrate highest class, too, when employed as DAC in a network or as preamplifier in a digital chain. Owing to this versatility, the seemingly high price is suddenly coming down to a fair noble price.

The AUDIOgramme:

Sound and craftsmanship:	Outstanding / Reference Class / 125 sonic points
Price-Performance Ratio:	Outstanding