



Photo-electric pick-up cartridge
 Made by: Digital Stream Corporation, Kanagawa, Japan
 Supplied by: Soundfoundations Ltd, Berks
 Telephone: 0118 9814238
 Web: www.ds-audio-w.biz; www.soundfoundations.co.uk
 Price: £4800

**AUDIO
FILE**

DS Audio DS 002

DS Audio made a real impact with its DS-W1 cartridge [HFN Nov '15] adopting a new (or forgotten) technology for a cartridge that was neither a straightforward MC nor MM design. Here the movement of stylus and cantilever interrupts an LED light source falling on a photocell within the cartridge body, producing a modulated (music) output.

So intrigued was the audio world by the DS-W1 – though it was originally intended only for the Japanese home market – that the range has grown quickly to three models. At £4800 the DS 002 is the lowest-priced offering by a large sum. Its siblings include the original DS-W1 at £7500 and the extreme DS-Master 1 at a cool £19,000 (from which the DS 002 has trickle-down benefits).

The DS 002 uses an aluminium body instead of the 'ultra-duralumin' of the dearest model, albeit of

'The bass sounded as if it might cut loose like a runaway train...'

a similar design. Its aluminium cantilever is fitted with a Shibata stylus but has the wire suspension system of the DS-Master 1 for greater tonearm compatibility.

Set-up was much easier than fine-tuning the DS-W1 – VTA was much less fiddly and everything snapped into focus once the sweet spot was reached. We found that it worked best with the cartridge top perfectly parallel to the surface of the record. Once you switch on the included EQ/phono stage unit, the cartridge is illuminated by a blue stripe across the front, which looks striking, especially if you listen with the lights out!

SOUNDSTAGE MAGIC

The DS 002 provides the same 'blackness' in the silences as the DS-W1, as well as bass that sounds

as if it might cut loose like a runaway train... but never does. This cartridge certainly exploits speakers with tight focus and a 'hot seat', such as those from Wilson Audio or others with a regime involving positioning to the millimetre, or small monitors that act like point sources.

With this level of soundstage magic on offer, we turned to a recently-established roster of LPs that includes the Mobile Fidelity 'One-Step Process' edition of Santana's *Abraxas*, Johnny Winter's *The Progressive Blues Experiment* [Imperial] as representative of a normal release, and the 45rpm double LP of Bob Dylan's *Highway 61 Revisited* [Mobile Fidelity] in mono for contrast. We turned first to the Johnny Winter LP, whose sound has been described as 'grungy' – perfect fodder for those who think a good system can cut through murk.

Indeed it did, because the DS 002's sheer sonic cleanliness meant that nothing unsavoury was being added to the playback. It was pristine almost in the manner of a Shure V15Vx, but without sounding sterile. The ringing and jangling elements of bottleneck guitar enjoyed a clarity and twang that added to the presence, while diminishing the artifice of it being a recording, not reality.

It placed the instruments in the room with unmistakable actuality. The lower registers possessed plenty of mass, with the DS 002's plump bottom proving beneficial – for this LP can sound slightly thin with certain cartridges. There was plenty of stage width and depth for the DS 002 to exploit too, particularly on tracks such as 'Bad Luck And Trouble'. This is a guitar versus blues harp battle, spread across the room. Each element was located with



utter precision, while the Bob Dylan mono had perfect central positioning.

ABOVE: This shot clearly shows DS Audio's crimped alloy cantilever, suspended by a tie-wire, and fitted with a Shibata-profile diamond stylus. With the phono stage on, a blue stripe lights up!

The whizz-bang dexterity of the DS 002 in three dimensions was of no concern here, and one could focus just on sound quality. Every vocal tick and musical lick was as natural as we've ever heard it.

Then we come to the vibrancy and shimmer of *Abraxas*. With this LP we witness the panoply of the DS 002's talents, and the results are spectacular. Dazzling details, the faultless interplay of the Latin rhythms that define Santana's oeuvre, powerful percussion – the DS 002 revealed the lot!

VERDICT

Charmed by the DS-W1, we found its 'budget' sibling even more enchanting – especially the transparency attributable to the photocell technology. This is clean, yet sweet, precise in imaging and grand in scale. A triumph. ☺

HI-FI NEWS SPECIFICATIONS

Generator type/weight	Optical / 8.1g
Recommended tracking force	1.6-1.8mN (1.7mN)
Sensitivity/balance (re. 5cm/sec)	838mV / 0.56dB (from Eq unit)
Compliance (vertical/lateral)	15cu / 20cu
Vertical tracking angle	22 degrees
L/R Tracking ability	75µm / 70µm
L/R Distortion (-8dB, 20Hz-20kHz)	0.3-9.1% / 0.5-8.1%
L/R Frequency resp. (20Hz-20kHz)	+7.8 to -0.8dB / +5.0 to -3.7dB
Stereo separation (1kHz / 20kHz)	25dB / 10dB