

Hana And Her Sister...

Meet the Hana twins...a pair of moving coil cartridges from Japan that can be yours at an exceptionally low price. Paul Rigby is smitten by their charms.

Low cost moving coil (MC) cartridges are a rare beast – for very good reasons. Besides my budget reference Denon DL-103, I find it tough to recommend a low cost MC, since most are not so good, so there was a certain amount of initial trepidation before reviewing these two designs from the Japanese outfit Hana: the EH and EL.

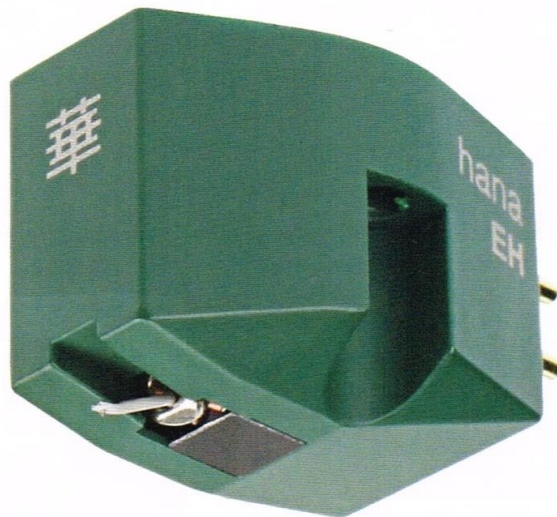
Manufactured by the Excel Sound Corporation (a manufacturer of cartridges for forty years), the EH (Elliptical High) is a high output (2mV) model connected through an MM phono amplifier, while the EL (Elliptical Low) is a low output (0.5mV) cartridge connected through an MC phono amplifier.

Both arrive in a 'moss green' coloured body and both sport an aluminium cantilever and 'synthetic elliptical' stylus; there are more expensive Shibata stylus versions.

Although these cartridges felt solid, they are light. Shockingly light, in fact, when compared to my budget reference Denon DL-103 which weighs in at 8.5g – against the Hanas' 5g. Fortunately, my Origin Live Enterprise arm was able to cope, but you might like to make doubly sure that your turntable's arm can balance out such a light cartridge if interested. The recommended tracking force of both models is 2gms.

SOUND QUALITY

I was going to start with Jazz, but switched to a variant instead. Edie Gorme and a slice of bossa nova on the album 'Cuatro Vidas' with the



backing outfit El Trio Los Panchos and the soft ballad 'Vereda Tropical'.

This track is perfect when challenging low-priced MC cartridges. It offers delicate yet complex vocal harmonies, bold Spanish guitars and a recessed version of the same, some relatively exotic percussion via conga drums, wood block and maracas and plenty of potential silence flowing around the lot.

I selected this LP to focus more on the mids and treble areas of the sound spectrum, although a subdued double bass did ask questions of the Hana's lower frequency capabilities.

To begin, I selected the EH model, which meant plugging the turntable into the MM sockets of my Icon Audio PS3 phono pre-amp and upping the gain a couple notches to reach normal MM volume.

My first impressions of this Hana

reflected our tests. The EH was a very smooth, easy-going performer. Gorme had an attractively husky edge to her delivery that was beautifully portrayed here, along with subtleties such as intakes of breath and upper midrange vocal straining during crescendos. The singers providing a harmonic backing were not just smoothly portrayed, but mellifluous in tone.

Moving to the Spanish guitars, both lead and rhythm versions were accurately reported. In fact, the latter, normally a rather shy instrument, was illuminated and its player found to be amusing himself in the corner of the soundstage, I perceived, while the entire bank of percussion, shoved onto one channel by the mastering engineer, had admirable instrumental separation. Hearing each instrument as it entered and left the

arrangement was never a problem.

Turning to more dynamic fare, I chose a newly re-issued Joy Division album – Substance – and played the aggressive song 'Leaders of Men', introduced by a rather insistent bass guitar.

Lead vocals were articulated well by the EH. There was a lot of passion and energy infused into this area which could have invited occasional slurring and blurring from inaccurate stylus tracing, but the EH successfully resisted any such urge.

More than that, the texture of the vocal delivery added to the emotive presentation and this helped my ear engage with the power of the music.

Bass, although lacking a touch of punch and attack, still delivered sufficient heft and power to provide a balance to the track as a whole.

This aspect also gave the track a forceful foundation. Similarly, the bass

and a rich sweeping effect during the mid-track string crescendos, while the wind section, free of any suggestion of brittleness, offered calm assurance. As the track reached its conclusion, an admirable focus was evident, as the arrangement became more complex in structure.

There was a recorder 'solo' in the track 'Tema dei Ricordi' that showed how relatively revealing the EH can be for an MC at this price. This is good for critical audiophiles, there was enough information to fully examine and judge the master.

On the other hand, if the master or pressing was not up to the job then the music became less enjoyable. That was the case here: the master failed to cope with dynamic extremes causing the recorder solo to lapse into brightness. Of course, this is not a

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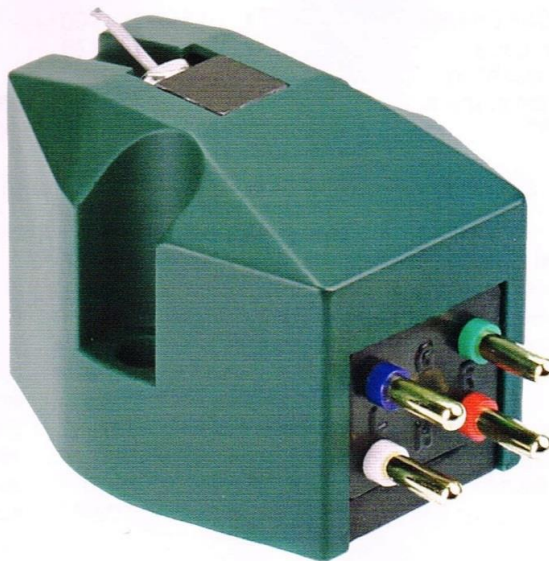
guitar, rolled along with an addictive toe-tapping rhythm.

Finally, looking for a more classically-arranged piece, I turned to Ennio Morricone and the music from the cult film 'Il Prefetto Di Ferro'. Its title track exhibited flow

criticism of the EH, which was merely doing its job.

Later, during the track 'La Ballata del Prefetto Mori', the challenging tones of Rosa Balestrieri, a folk singer who threatens to shred her vocal chords, was illuminated well by the EH. The texture of her voice was successfully presented, adding atmosphere and nuance to her delivery.

Moving to the EL, I began the sound test for this particular cartridge with Gorme's Spanish venture. As our tests showed, treble on this track was not quite as obvious and the midrange, while



Despite its solid chassis, the Hana is a lightweight 5gms.

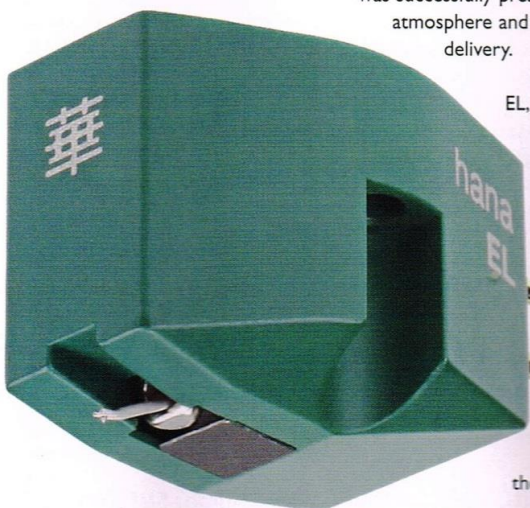
still producing an impressive degree of detail, had a touch of warmth.

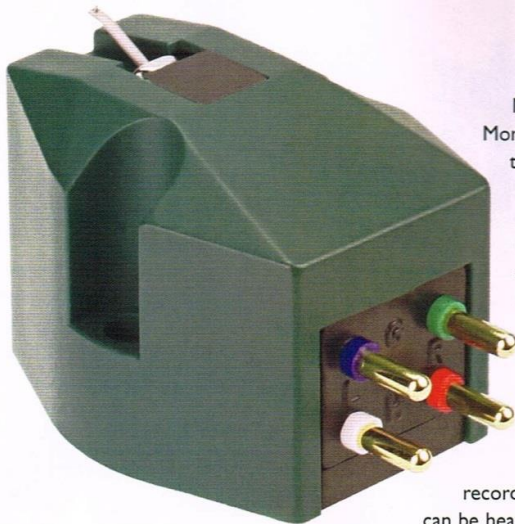
This could be heard via the plucked strings of the Spanish guitar which sat back in the sound stage a tad and, although they could still be easily heard, did not present quite the same sort of impact as the EH in terms of focus and clarity – a slight midrange glow being the result of that extra warmth. This element didn't effect the percussive effects tremendously but it did add extra romance and a slight softness to the vocals.

In some respects, this touch of warmth provided a new level of engagement when the ear focused on the vocal delivery. The slight warming tone beckoned to my ear and I heard the instrumentation almost float over the soundstage.

Moving to Joy Division I was impressed, faced with this high energy music, at how integrated the presentation appeared. Yes, the treble-infused cymbal strikes were not quite as focused or as reverberant as the EH, and the lead vocal was not as separated from the backing instruments either, but the EL did combine all the best parts of this intense, dynamic track and offered a highly enjoyable experience, nevertheless.

I quickly learned that the EL is all about that: the overall experience. Whereas the EH offers plenty of highlights and features to underline and admire, the EH excels in terms of how it co-ordinates music to offer a smooth, coherent and enjoyable event.





One of the lower cost and better value for money MC designs currently on the market.

Bass performance, possibly because it's so tightly integrated within the soundstage of the EL, proved to be a powerful driving force. It never dominated or bloomed but remained balanced within the mix, providing a secure substructure and a sense of movement to the entire song. With the EL I found the temptation, with high energy music, was to let rip and push volume to maximum limits.

Moving to Ennio Morricone and the title track to 'Il Prefetto Di Ferro' the EL accentuated the rich sweeping strings and added a romantic flow to the wind section. As for the troublesome recorder solo that can be heard within 'Tema

dei Ricordi'? Well, here the EL exhibited a rather more forgiving performance which actually meant a slightly more enjoyable listening experience on this track – especially when it came to that recorder which, via the EH, can be rather piercing to the ear. The EL toned down these strident effects slightly.

That's not to say that detail was found wanting, as during Rosa Balestrieri's performance her textured vocal output retained its full force, making her emotive impact fully present.

CONCLUSION

There's a sense of swings and roundabouts in terms of the EH and EL versions of the Hana cartridges.

I felt that the EH provided a slightly more accurate and tonally tad more exciting performance in how the detail was extracted from the master. The EL, with its small measure of extra warmth, gave the music a more forgiving nature.

In effect, you could say that the EL looks at the bigger picture. Rather than focusing upon specifics, it offers a possibly more engaging and flowing performance.

Both these moving coil cartridges performed well and they bring genuine advantages to any listening session at a low, low price. Terrific value for money then.

SYSTEM USED

Origin Live Sovereign turntable
Origin Live Enterprise 12" arm
Denon DL-103 cartridge
Icon Audio PS3 phono stage
Aesthetix Calypso pre-amp
Icon Audio MB 845 Mk.II monoblocks
Quad ESL-57 speakers with One Thing mods
Vertex AQ & Atlas cabling

MEASURED PERFORMANCE

Both EL and EH had remarkably smooth frequency response characteristics, with no treble peaking; both will sound a little warm or 'easy' but the low output EL is the warmer of the two – see our response analyses. The high output EH (Elliptical High) had stronger treble and was the most accurate.

The EH gave a very high 3.4mV output and needs a 47k Ohm MM load Hana state, so this is an MC compatible with an MM input.

Output from the EL was healthy at 0.7mV at 5cms/sec rms (1k load) where budget MCs can measure 0.3mV or so. However, the relatively high impedance 30 Ohm signal coil needs a 1kOhm load or greater Hana say, far above the 100 Ohms of most MC inputs. With 100 Ohms, output was a still-healthy 0.34mV and frequency response did not change.

Both cartridges tracked well but the low output EL, with its smaller signal coils, tracked best in the mid-band, managing a high 20cms/sec rms. The EH was a tad worse, managing 16cms/sec rms.

Channel separation measured around 28dB on both units and this is a good result.

Both had near-optimum vertical tracking angle, measuring 25 degrees (22 degrees is optimum), minimising distortion on vertical modulation (L&R images).

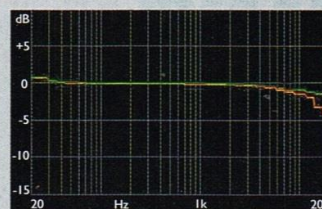
Both cartridges are very light at 5gms where 6gms is a common minimum. As a result some arms may not balance out unless extra weight is added at the headshell.

Otherwise, both Hanas measured well all round – and the EL can be used with conventional 100 Ohm MC phono stages in spite of what Hana say, NK

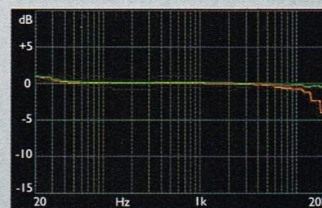
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|---------------------------------|--------------|
| Hana EL/EH | |
| Tracking force | 2gms |
| Weight | 5gms |
| Vertical tracking angle | 26degrees |
| Frequency response | 20Hz - 18kHz |
| Channel separation | 29dB |
| Tracking ability (300Hz) | |
| lateral | 80µm |

| | |
|-----------------------------|----------------|
| vertical | 45µm |
| lateral (1kHz) | 16/20 cms/sec. |
| Distortion (45µm) | |
| lateral | 0.7% |
| vertical | 2.4% |
| Output (5cm/sec rms) | 0.7 / 3.4mV |

EL FREQUENCY RESPONSE



EH FREQUENCY RESPONSE



HANA EL £276



OUTSTANDING - amongst the best

VALUE - keenly priced

VERDICT

A wholly tolerant cartridge that is smooth and engaging.

FOR

- musical engagement
- romantic mids
- bass
- value for money

AGAINST

- nothing at the price

HANA EH £276



OUTSTANDING - amongst the best

VALUE - keenly priced

VERDICT

Precise and investigative, the EH is ideal for those looking for detail.

FOR

- detail
- focus
- clarity
- value for money

AGAINST

- midband tracking

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