Grouptest

CARTRIDGES £265-£510

Groove riders

Looking to take your turntable to the next level? **Andrew Simpson** puts six premium pick-ups through their paces

WHILE A TURNTABLE and

tonearm are the most obvious moving parts of a vinyl spinning system, it's the cartridge that's at the business end of things, tasked with rolling up its sleeves and getting deep down and dirty to dig out all the music that's packed into those LP grooves. It's a big ask for such a small component, so it's vital that the cartridge you choose is up to the job and won't hold its partnering kit back.

Needle work

At the budget end of things, most cartridges are usually of the moving magnet (MM) type, which offer healthy outputs for feeding a 'standard' phono stage with 47kohm loading. Go beyond £200 and things get more interesting, with different designs bringing alternative benefits and compromises to the MM approach, helping to take your turntable to the next level.

Of the six upgrades we've cherry picked for you, Grado's Reference Platinum 1 employs the moving iron (MI) approach to generating its signal via a quality package that belies its price tag. Both the Benz Micro and Sumiko models adopt the moving coil (MC) principal, while being capable of feeding a standard MM phono stage, with the former presented in sparkling silver livery and the latter shunning its exterior for better sonics.

Representing the moving magnet school are the keenly priced Goldring and the group's most expensive golden boy from Nagaoka, with both offering VFM via their replaceable styli. Finally, who says top quality low output MCs are the preserve of the high end? Not Ortofon, as its brand new Quintet Blue reveals.

ON TEST



Benz Micro MC Silver £275 p27 Swiss made MC promises plenty of class from a brand used to mixing in vinyl's high-end circles, but can Benz cut it on a budget?



Goldring 2500 £395 p29 Well-built metal bodied MM tops Goldring's 2000 range with a '2 SD' diamond stylus and a healthy output to get the most from your music



Grado Reference Platinum 1 £265 p31 It might be the cheapest model, but this is the only one packed in wood for music at its natural best



Nagaoka MP-300 £509 p33 Penultimate pick-up from the long-standing, no-nonsense Japanese brand. Will it prove that all that glitters is gold?



Quintet Blue £325 p35 This new model from the Quintet series offers lots of spec to show that low output MCs don't always equal high prices



Sumiko Blue Point Special EVO III £295 p37 With its exposed internals the BPS EVO III looks like the pick of the bunch for the hardcore audiophile, but the question is can you handle it?



Benz Micro MC Silver £275

Will this entry-level high output moving coil bring some welcome Swiss sheen to your turntable's sonics?

DETAILS

PRODUCT Benz Micro MC Silver ORIGIN Switzerland High output moving coil cartridge WEIGHT 5.7g FEATURES • Quoted output: 2mV • Cantilever: aluminium Stylus: fixed/ elliptical • Tracking weight: 2a SUPPLIED BY Analogue Seduction TELEPHONE 01733 350878 WEBSITE analogueseduction. net

ith company founder Ernst Benz's background in making delicate instruments including Swiss watches, Benz Micro has an enviable reputation with the cartridge cognoscenti. Since 1994 it has been in the hands of product collaborator Albert Lukaschek, who runs the company today.

For Benz Micro, £275 is the entry-level point into its MC only cartridge range that extends all the way up to its £2.5k ebony bodied LP-S showpiece, and thankfully the Silver still packs some Swiss pedigree within its modest price. It is almost identical to its price-matched Gold sibling, but with a healthier 2mV output compared with the Gold's 0.4mV, so it can be plumbed into a phono stage's standard 47k MM input.

The Silver boasts Benz's recently redesigned rear pole piece with a locking azimuth and suspension mechanism and features a cross-coil armature with strong hybrid magnets made of neodymium, boron and iron. Like the Gold model, it uses a soft butyl rubber O-ring damper that's custom made in the US for Benz by a company that supplies gaskets to the aerospace industry. Benz hasn't scrimped on the diamond either, and treats the Silver's alloy cantilever to a Fritz Gyger elliptical stylus.

While its solid sides and colourcoded pins offer some help, having to locate long bolts that pass through the cartridge body into circular nuts that nestle within recesses at the cartridge's base makes the Silver one of the trickiest pick-ups on test to install. And while the Silver's mirror finish may bring some bling to your platter, its reflective surfaces and sloping front panel make alignment even more vexing.

Sound quality

It doesn't take much music to realise that the Silver is cut from Benz Micro cloth with its well ordered and wide open soundstage. The classical chords of *La Traviata* fill all corners of my room with ease, highlighting that the Benz has one of the most expansive left-to-right soundstages of all the models on test.

The Benz Micro isn't a particularly forward sounding cartridge, especially in the midrange, which makes for a very easy listening experience, especially over extended sessions, but on some material I would welcome a bit more bite. On Barrett's track for example, the way some of the other cartridges allow the more forceful guitar strikes to cut through the air with greater degrees of attack gives the music a shade more excitement. This trait is further evidenced with the REM songs, which sound very pleasant and panoramic, although a dash more vivacity would help give the music a bit more edge.

Bass is well ordered across all the test tracks, and if your system could do with extra control in this respect then the Benz may prove a welcome

ON TEST

First thing's first: as with all Benz MCs the Silver is phase-inverting, so you may choose to janore the colour coding on its rear pins. This new high output MC is not quite as beefy as Benz's Micro ACE model (2.25mV versus the latter's 3.2mV into preamp loads above 1kohm), but the 40dB midrange separation is exceptional and quite the best of this month's group. Unequalised distortion is low at 2.4% (re. 1kHz/5cm/sec), but the equalised trend is higher, reaching a full 16% at 10kHz (re. -8dB). Just like the Sumiko MC, this is a reflection of the Silver's very extended high frequency response, which climbs 1-2dB from 2-10kHz before lifting to +4dB at 20kHz! This is most obvious with lateral cuts, providing a boost to central (vocal) images. Compliance is moderate at 20cu and tracking secure to 80um at a moderate 1.9g downforce - distortion is just 0.9% at +18dB (re. 5cm/sec at 315Hz). PM



tonic. The soft edges of the lower bass notes within La Traviata are perfectly captured and voiced well back within the mix. Although the Benz's bass doesn't extend as far down as some of the other models on test, such as its price-rivalling Grado, it still gets the Little Dragon track to make my feet start tapping along, thanks to the rhythm and texture on offer in the upper bass. The REM material, however, isn't quite as forgiving and while these songs sound clean and enjoyable across midrange and treble, the lack of low-end wallop tends to make the music sound thinner in comparison to the more meaty sounding pick-ups on test •





Goldring **2500 £395**

This metal-bodied moving magnet scores highly on spec, but how will it measure up in the musical stakes?

DETAILS

PRODUCT Goldring 2500 ORIGIN UK TYPE Moving magnet cartridge WEIGHT 8.2g FEATURES • Quoted output: 6.5mV • Cantilever:

Permalloy • Stylus: removable/ 2 SD fine line • Tracking weight: 1.7g SUPPLIED BY Armour Home TELEPHONE 01279 501111 WEBSITE armourhome.co.uk;

goldring.co.uk

ith a history that stretches back to when Edward VII was king, Goldring has a long-standing legacy for quality phono products.

The recently launched 2000 series brings the brand bang up to date, with the lower priced 2100/2200/ 2300 models rubbing shoulders with their 1000 series cousins, which have proved popular with audiophiles for many years. All 2000 models use permalloy in their armature tubes to reduce mass with super permalloy in their shielding and fixed pole shoes, while powerful samarium cobalt magnets account for their high outputs. The 2400 and flagship 2500 model also get their delicate internals housed within aluminium bodies for added rigidity. Each ascending price point within the range buys you a better stylus, and the 2500 eschews the 2300's Gyger II and the 2400's Vital fine line, opting for a '2 SD' diamond on the tip of its tapered cantilever.

Being a moving magnet design, it has a replaceable stylus and swapping it is just a matter of pulling the curved stylus and cantilever housing forwards of the cartridge body, hence you can leave the body fitted to your tonearm in the process. All styli in the 2000 range are interchangeable, so if you can't afford the 2500 you can fit a cheaper replacement from further down the range.

The cartridge body's threaded mounting holes makes initial

installation straightforward, although the cartridge pins are quite close together, so you need to make sure that the tonearm cables' exposed connecting lugs aren't touching when hooking it up. Due to its curved front profile and stepped sides, getting the Goldring aligned takes a bit more effort than most, although its well exposed cantilever does help.

Sound quality

The first thing you notice about the 2500 is the higher levels of background noise it throws up compared with the other pick-ups on test when its finely profiled needle hits an LP's lead-in groove. Whether this is due to its very healthy output and refined tip reaching deeper into each groove I can't say, but I do know that when the music begins this is quickly replaced by vast amounts of detail, which the Goldring's diamond is able to uncover. The slow building strings of La Traviata sound exceptionally clear, as it etches the chords into the air with precision.

The midband is equally strong and explicit with perhaps the sharpest delivery of all the cartridges on test, while sounding more forward. In many ways the 2500 is reminiscent of some of the digital streamers that have graced my system in recent months, such is its polished presentation. Closing my eyes with the Goldring working its way through Barrett's *Octopus*, for example, I can be easily convinced that I'm hearing

ON TEST

Goldring's specification for its 2000 series suggests they share the same generator (graded, Lassume, by performance), but differentiated by stylus. The 2500 is certainly a more subtle performer than the company's 2200 model and at 4.5mV (re. 5cm/sec). delivers the highest output in this month's test. The 2500 is free of the 2200's treble peak of +6dB/15kHz, but still has a +2dB emphasis from 6-8kHz that may well emphasise surface noise. This peak broadly coincides with a drop in output with vertically modulated grooves, suggesting the 2500's soundstage will be punchier in the centre than towards the far left or right. Distortion is also lower with in-phase (0.3-1.6%) than anti-phase detail (3-4%) right across the audio range. Without exceeding a 1.75g downforce, tracking is pretty good at 70-80um but the high 30° VTA suggests some tuning of arm height will be useful. PM

RESULTS AT A GLANCE



the 2010 CD remaster and not it's vinyl counterpart, such is the pick-up's penchant for clarity. When the music gets a little more demanding, however, these levels of insight and its forward nature can become a bit too full on. While sounding explicit, the guitar work in the REM tracks begins to harden up as the music gets more complex and I find myself limiting the volume to keep everything in check.

Across the REM tracks I'd also welcome a bit more warmth in the bass regions to bring some analogue richness into the music, but for systems needing more sparkle, the Goldring may be ideal •







Grado **Reference Platinum 1 <u>£265</u>**

From this US family business comes an alternative to the MM and MC brigade that gets back to nature

DETAILS

PRODUCT Grado Reference Platinum1 ORIGIN USA TYPF High output moving iron cartridge WEIGHT 6.5g FEATURES • Quoted output: 4.8mV Cantilever: four-piece OTL alloy
 Stylus: fixed/ elliptical Tracking weight 1.5g SUPPLIED BY Analogue Seduction **TELEPHONE** 01733 350878 WEBSITE analogueseduction. net; gradolabs.com

ith its ever expanding range of headphones, it's easy to forget that Grado Labs cut its hi-fi teeth selling cartridges almost 50 years ago. Unlike most cartridge manufacturers, Grado prides itself on the moving iron (MI) approach to pick-up design. Instead of a magnet attached to the upper end of the cantilever that moves against fixed coils in the cartridge body (or vice-versa for MC models), Grado mounts a piece of iron to the cantilever while a fixed magnet sits over the cartridge's internal coils, providing magnetic flux within its 'flux-bridger' system to generate a signal. The Platinum's loading is 47k, so a standard MM phono stage is all that's required. Unlike Grado's cheaper Prestige pick-ups, the Platinum's stylus isn't customer replaceable.

Judging by the finish of its handcrafted mahogany body and its carved wooden carry case, it's hard to believe that this is the cheapest model on test. Even the stylus guard is mahogany, and the Platinum's quality isn't just timber deep. Despite being the entry-level Reference model, it employs an optimised transmission line (OTL) cantilever with four separate sections of varying thicknesses bonded together to eliminate resonances, while its coils get ultra-high purity long crystal (UHPLC) oxygen-free copper wire.

Fitting is fairly straightforward thanks to its tapped mounting holes,

although you need to take care not to strip their wooden threads and the lack of colour coding on the cartridge pins can lead to mistakes when wiring it up. Its 16mm-tall body is higher than average, so be prepared to raise your tonearm for the correct VTA, but alignment is aided by the flat sides and vertical face.

Sound quality

You don't need to spend much time in the Grado's company to realise it's a bit of a honey and quite a different beast to the more analytical sounding species from within the group. It brings a softer tone to La Traviata, as though the performers have relaxed into their seats to let the music flow forth with a little less urgency in comparison to the Goldring and Sumiko's deliveries. The rich tones also add weight to the Barrett material, which brings a greater sense of scale as the instruments seem to gain more mass. Soundstaging isn't as wide as the Benz Micro, but nor are instruments as centrally congested as the Goldring's presentation, and it's how instruments are presented that reveals more of the Grado's hand. On the Barrett track, it shifts the focus so that the guitar is less jangly in the treble and instead I hear more of how the notes resonate, rather than the leading edges of strings being struck by nail or plectrum. While this richness will appeal to many and could help to calm an overly bright system, the Platinum's sound can

ON TEST

Grado offers a generalised specification for its pick-ups, which suggests that the 'moving iron' generator is at least very similar in all its models. In practice the '4.8mV at 5cm/sec' output is rather optimistic with 2.5mV being achieved in our tests, albeit with an excellent L/R channel imbalance of just 0.12dB at 1kHz. At 1.6g (1.5g is recommended) the Platinum 1 tracks like a dream, sailing through the 80um bands and achieving an equalised distortion of -0.6% at +6dB and +9dB (re. 5cm/sec at 315Hz), increasing to just -0.7% at +12dB, -0.8% at +15dB and -1.4% at +18dB with just the faintest signs of mistracking.

The Platinum's 20cu compliance suggests it's best suited to medium-to-low effective mass arms. The response shows a -2dB droop through the presence region (hence the 'rich' balance) followed by a +3dB high treble peak at 15kHz. Fortunately this is too high to give it's sound any sting! **PM**

RESULTS AT A GLANCE
Output level



seem a bit muddy in the bass, which lacks the refined control of the Ortofon and Sumiko models.

The plentiful bass and analogue tone is the ideal tonic for the REM tracks, casting them with the right blend of depth and smoothness, which gives them just the right amount of warmth and expression to remain loyal to their harder-edged nature without becoming too visceral and fatiguing. Cymbals are crisp with vocals sounding open and unprocessed and while the Grado is bettered by others in the group for instrument separation and bass control (if not extension), it's a very musical performer nonetheless •





Nagaoka **MP-300 <u>£509</u>**

This Japanese pick-up has considerable hi-fi pedigree and looks set to add a golden glow to your vinyl system

DETAILS

PRODUCT Nagaoka MP-300 ORIGIN Japan TYPE Moving permalloy cartridge WEIGHT 8g FEATURES • Quoted output: 3mV

Cantilever: Boron
 Stylus: removable/
SuperFine elliptical
 Tracking weight
 1.8g
 SUPPLIED BY
Analogue Seduction

TELEPHONE 01733 350878 WEBSITE analogueseduction. net; nagaoka.co.jp espite the glamorous garb, you can clearly spot that this is a Nagaoka a mile off, thanks to its distinctive squared-off shape that's been consistent with the company's cartridges for decades.

As well as producing its own modestly priced range of pick-ups, Nagaoka is also a leading styli and precision-made magnet supplier to other cartridge makers around the globe. All Nagaoka cartridges are moving permalloy designs (or magnetodynamic permalloy, hence the 'MP' moniker within each model name). The range starts with the budget-priced MP-100 at £85, which sports a conical stylus and samarium cobalt magnets. The MP-300 is the penultimate model and trumped only by the £628 MP-500, which shares the same slender boron cantilever as the 300 and also gets a SuperFine line diamond in place of the 300's SuperFine elliptical tip.

Internals are of equal high order, with a powerful samarium cobalt magnet in its generator, an anti-ferro magnetic permalloy shield and a carbon fibre reinforced plastic shoe. Its replaceable stylus is a simple push-fit design with replacements interchangeable across the range. Like the 500, the 300 has two mini bolts to hold the cantilever assembly in place, which you need to remove when swapping its stylus.

While the MP-300's retro looks may be appealing, its retro approach to

tonearm installation is less so. Nagaoka's traditional mounting system of open side lugs, long bolts and circular nuts makes for a fiddly fit. The cantilever's set back position under the front of the cartridge also makes it harder to see, although the cartridge's square front and sides are a decent visual aid when lining everything up.

Sound quality

As soon as the needle hits *La Traviata*'s grooves I'm given a flavour of its unique personality. The strings sound bold and powerful, with a tone and clarity that puts it somewhere between the strident sounding Sumiko and the softer voiced Grado. As the sound of the strings project forward of my speaker plane as well as sideways, they have a real sense of body, which adds gravity and texture to the music.

Bass is equally noticeable, and the MP-300's output is near the Grado's across the REM material with perhaps a little less depth in exchange for a bit more control. Even at low volumes, Bill Berry's gathering drum rolls during *I Remember California* sound like low rumbling thunder of window rattling proportions, backed up by Mike Mills' bass guitar, which is separated out convincingly.

At the other end of the spectrum, while treble sounds strongly defined, it isn't given the freedom to really escape the soundstage in the same way as its cheaper rivals allow, such

ON TEST

The general hallmarks of the MP-300 are not dissimilar to Nagaoka's upmarket MP-500 particularly in respect of its response shape – the +2dB lift at 8-12kHz conferring plenty of bite – and impressively low distortion. Lateral modulations are evidently reinforced more strongly so this 'bite' will be more obvious from strings and percussion in the centre rather than periphery of the soundstage.

The MP-300 is a little less compliant than expected, but similar to the Grado at 18cu, but tracking is good enough at 70-80um, the elliptical stylus starting to lose its grip at around +15dB (re. 5cm/sec). Low-to-medium effective mass arms are recommended as is some extra damping, if on offer. The MP-300's 3mV output is about average for this group, but the 0.6dB channel imbalance could stand some slight improvement. However, channel separation through the midrange is excellent at -40dB. **PM**

RESULTS AT A GLANCE



as those from Ortofon and Sumiko. Yukimi Nagano's vocals on the Little Dragon track are clearly articulated, but her voice has a tendency to sound more held within the mix, rather than being set free to soar above the soundstage so that her high notes can take flight. The percussive cymbal taps in the right channel are easy to place and clearly defined, but lack the final degrees of spine-tingling shimmer to really light up my listening room.

Its timing is one of the best on test, with an assertive beat that sounds in control without forcing the pace, which really favours the dance-driven nature of Little Dragon's melodies







Ortofon Quintet Blue £325

With its simple looks and solid body, will this new Blue MC make its mark against its high output rivals?

DETAILS

PRODUCT Ortofon Quintet Blue ORIGIN Denmark TYPE Moving coil cartridge WEIGHT 9g FEATURES • Quoted output: 0.5mV • Cantilever: aluminium Stylus: fixed/ nude elliptical Tracking weight 2.3g SUPPLIED BY Henley Designs TELEPHONE 01235 511166 WEBSITE henleydesigns. co.uk; ortofon.com rom entry-level bargain moving magnets like the 2M Red to its budget busting £5k Anna MC statement, Ortofon seems to have a cartridge for everyone. Starting at £200, the company's new Quintet MC series challenges the notion that MCs should cost a king's ransom to justify

investing in over a good MM design. The five-strong Quintet range comes housed in bodies made of a special acrylonitrile butadiene styrene (ABS) thermoplastic material, chosen for its lightweight and durable properties. Internally each model packs fixed neodymium magnets and each step up the Quintet ladder brings improvements to coil wires, cantilever material and stylus profile.

The Blue improves on the £200 Red by using an elliptical stylus of the nude type, whereby the whole stylus is a solid diamond that's bonded to the cantilever, instead of an elliptical diamond tip bonded to a metal shank that's in turn bonded to the cantilever. The Blue also upgrades the Red's standard copper coil wire with pure 4-nines copper taken from the £500 Bronze model. At the top of the Quintet tree sits the Black variant, which boasts a nude Shibata-shaped stylus affixed to a boron cantilever and Ortofon's Aucurum coil wire (gold plated 6-nines copper). A mono model at the same price point as the Blue completes the range.

At 18mm the Blue has the tallest body of all the models on test, so it's worth checking that your arm can be adjusted to accommodate its height and VTA. Once at the right height, its rectangular body and threaded mounting holes make it easy to align, although its output pins could do with being more widely spaced to make wiring up a bit easier.

Sound quality

Being the only low output MC on test could imply that the Ortofon will be the most demanding of its partnering phono stage, to ensure its signal is brought up to MM levels without undue influence.

A few bars into the Little Dragon song shows how unfussy it actually is, as it presents all the detail in the track with real dynamism. It may not be as highly revealing as the Goldring or Sumiko models, or have as much overall warmth as the Grado, but the line it treads between these models makes for a highly engaging compromise. On the Barrett track, lead guitar notes in the instrumental section sound sharp but never harsh, with chords struck firmly before reverberating with natural echo.

Its soundstage is expansive left to right, of a similar size to the one rendered by the Benz and it also possesses a greater talent for bringing instruments within it to life. On *La Traviata* it really plays to how the piece moves from quiet passages to louder sections with great effect, pulling you into the music. Each instrument gets the space to let its

ON TEST

Ortofon's new Quintet Blue is the only traditional medium-output MC in this month's test, besting its claimed 0.5mV into a 1000hm load at 0.62mV with a superb 0.1dB channel balance and acceptable >25dB separation through the midrange. In practice, its performance is not dissimilar to Ortofon's own Vivo Blue MC. The Quintet Blue's compliance is a symmetrical 16cu in vertical and horizontal planes and the 'nude elliptical' stylus offers secure tracking up to ~70um groove modulations, just loosing its grip at +18dB (315Hz).

Just like the Vivo Blue, the Quintet Blue's high frequency distortion and response are both lifted with lateral cuts, reaching +1dB through the presence band and mid-treble, suggesting that its soundfield may be emphasised stage front. Equalised distortion (-8dB) is low at <1.5% up to 2kHz, but climbs to a peak of 16% at an inaudible 17kHz. **PM**



notes grow, which it knits together into a cohesive whole, revealing its measured and neutral presentation.

Picking up the pace with the REM tracks shows it is equally capable when letting its hair down. *Turn You Inside-Out* makes a grand entrance that's full of impact and depth, while the guitars are cranked up with raucous energy, without becoming too hard edged when the volume heads north.

Bass is well articulated and evenly presented without being overly emphasised or rolling off too early, making its presence and detail felt without becoming overwhelming on more demanding bass-heavy music • •







Sumiko Blue Point Special EVO III <u>£295</u>

The latest incarnation of this classic high output MC boasts a naked design to get to the heart of the music

DETAILS

PRODUCT Sumiko Blue Point Special EVO III ORIGIN US TYPE High output moving coil cartridge WEIGHT 8.3g FEATURES • Quoted output: 2.5mV • Cantilever:

aluminium • Stylus: fixed/ elliptical • Tracking weight: 2g

SUPPLIED BY Analogue Seduction TELEPHONE 01733 350878

WEBSITE analogueseduction. net; sumikoaudio. net alifornian cartridge maker Sumiko acts as both importer and distributor for some seriously high-end brands including Sonus faber and Audio Research, as well as

selling its own range of pick-ups. The EVO III sits atop the company's entry-level Oyster range, with its blue finish distinguishing it from the equally stripped back £595 handcalibrated Blackbird model that's the starting point in the Reference series. To keep prices down, the BPS gets an aluminium cantilever with a special coating in place of the Blackbird's boron variant.

What clearly sets it apart from every other pick-up on test is its obvious lack of a protective body, leaving its generator exposed to the outside world. Sumiko's reasoning being that the best way to prevent resonance from a cartridge's outer shell entering the replay chain is to do away with the outer shell altogether, an approach that's also adopted by many top-flight cartridges with four-figure price tags.

Looking at the Sumiko's intricate working parts up close reveals a very high standard of craftsmanship, although with its exposed internals seemingly vulnerable to clumsy fingers, you might expect that an iron nerve and expert steady hand are essential to getting it safely set up. You do need to take extra care, of course, but thanks to its large top and rear plate, you have plenty of surfaces to grip. And while its pre-threaded mounting holes and widely spaced cartridge pins bring some relief, achieving spot on alignment is always going to be a bit of a challenge given the lack of an outer shell to align it by.

Sound quality

A quick lap of my test music reveals that the Sumiko's tonal balance is more sensitive than most to VTA. With the VPI arm wand parallel to the LP's surface, the treble sounds overly bright, with emphasised sibilance on the REM material that makes the cymbals sound 'spitty'. Dropping the arm pillar so that the arm wand slopes slightly upwards towards the headshell (to make the cantilever's angle of ascent not as steep) pays dividends in calming the top end down. It's still explicitly detailed, meaning I'm able to hear REM at their aggressive best, with guitar riffs ripping free from the soundstage and fired at me centre stage, but the excessive brightness is gone, replaced by a live experience-like energy that's hard to ignore.

In many respects the Sumiko is similar to the Goldring with lightning fast transients, but at the extremes it's less clinical in the midrange and treble and more expressive.

ON TEST

This 'naked' high output MC is packed full of energy and character. Output is healthy for the breed at 2.5mV (re. 5cm/sec) into a standard 47kohm load and while compliance is, as Sumiko specifies, a little on the low side at 15cu and best partnered with medium/ heayweight arms, it still tracks like a dream sailing through the 80um band and incurring just 1.1% THD at +18dB. Distortion looks to be on the high side at 17/15% (L/R) at 10kHz, but this is as much a reflection of the EVO III's exceptional bandwith (other pick-ups roll-off earlier and so cannot generate the ultrasonic harmonics). Even when well run-in, the EVO III has a powerful presence and treble response (+1dB from 3-10kHz and up to +3dB/20kHz and beyond) that will be noticeable with strong central rather than peripheral stereo images. You can play with the arm pillar height to tweak the elliptical stylus' VTA and ameliorate any excess sizzle! PM



While Barrett's vocal overdubs are easy to distinguish, it's the lilt of his voice and its unique nuances that the BPS turns its attention to, revealing the heart of his performance.

Similarly with the Little Dragon track, the subtleties in the treble sound more enchanting here than with the other five pick-ups.

At the other end of the scale, the bass doesn't quite have the depth or warmth of the Grado or Nagaoka, but still packs a decent thump that's well defined. Imaging is also a key string to its bow, which is made clear by how it builds a tangible orchestral picture during *La Traviata* of impressive scale and depth •



Group test verdict

After countless laps on the wheels of steel to take this month's pick-ups to their limits, **Andrew Simpson** pulls into the pit lane with his final verdict

EVERY CARTRIDGE IN this group has plenty to offer, and what you go for comes down to system matching, budget and personal taste.

The Nagaoka isn't a bad sounding cartridge by any means and offers a similar performance to last year's Nagaoka, which was our crowned winner. Price hikes over the years means the MP-300 now costs more than twice as much as the MP-150 and it's substantially bettered by cheaper competition.

Next up is the Goldring and if your system needs a shot in the arm this could just be the ticket, but as a long term solution the Goldring is just too revealing, so partner wisely if your system is already on the bright side.

The third pick-up to head for the car park is the Benz Micro, which offers surprising levels of Swiss precision for under £300. But while I expect it's genteel and open soundstage will appeal to many, it's a bit too well mannered and would benefit from more vivacity and a stronger voice to really make its mark.

The Grado takes third place by offering a sound that's full-bodied with a rich tone and an analogue warmth, making it a joy to listen to. It's also superb value for money and with its hand-made wooden shell it could have easily passed for the most expensive on test despite being the cheapest. Where it loses out to the Sumiko is in the accuracy and refinement stakes.

The Sumiko's model name may sound more Subaru forecourt than high-end vinyl and its naked design is enough to give vinyl newbies nightmares, but when set up for optimal performance it's a stonkingly honest cartridge for the cash with a level of sophistication and detail that belies its price.



While on paper the Blue's spec cloesn't better its rivals, it's the execution of its engineering that earns it top marks. It offers the most comprehensive and enjoyable performance with all music, showing Ortofon has clearly hit upon another magic formula.



Key features

Туре	MC (high output)	MM	MI (high output)	Moving permalloy	MC (low output)	MC (high output)
Quoted output	2mV	6.5mV	4.8mV	3mV	0.5mV	2.5mV
Replaceable styli	No	Yes	No	Yes	No	No
Weight	5.7g	8.2g	6.5g	8g	9g	8.3g
Cantilever/stylus	Aluminium/elliptical	Permalloy/2 SD fine line	OTL alloy/elliptical	Boron/superfine ellip.	Aluminium/nude ellip.	Aluminium/elliptical

TRY WITH THESE

TURNTABLE: Michell TecnoDec £897 HFC 309

You're going to need a decent turntable to do your new cartridge justice and Michell's entry-level TecnoDec at £897 with Rega RB202 tonearm,

freestanding DC motor and acrylic/vinyl platter is the place to start.

PHONO STAGE: Rothwell Rialto £380 HFC 381

February's phono stage Group Test winner, Rothwell's plainlooking little Class A box gives a sublime performance across both of its MM and MC inputs, making this a worthwhile investment for a lifetime of cartridge upgrades.

Rothwell)

TRACKING FORCE GAUGE: Shure SFG-2 £38 £38 HFC 385

Ensuring the force is always with you needn't be a job for Obi-Wan Kenobi thanks to Shure's simple mechanical sliding weight/seesaw principal of measuring and setting the ideal tracking force.

