

Belt-driven turntable with electronic speed control and tonearm  
Made by: Clearaudio Electronic GmbH, Germany  
Supplied by: Sound Foundations, UK  
Telephone: 0118 981 4238  
Web: www.clearaudio.de; www.soundfoundations.co.uk  
Prices: £1200-£1450 (wood), £3116 (Profiler arm/Concept V2 MM)

AUDIO  
FILE

## TURNTABLE PACKAGE



# Clearaudio Concept Signature

Clearaudio's entry-level deck for over a decade, the Concept is refreshed with 'TSC' (Tacho Speed Control) and speed selection, plus a selection of arms and cartridges  
Review: Adam Smith Lab: Paul Miller

Thanks to the continued resurgence of the vinyl format, enthusiasts can now choose from a good number of plug-and-play turntable packages. Even better, the quality of these complete solutions – once considered a first step on the vinyl ladder for those wanting ease of use, or for whom the dark arts of turntable setup were a terrifying mystery – has been creeping ever higher.

The latest company to refresh its package lineup is Germany's Clearaudio, its Concept Signature being a new iteration of a turntable set-up that has been on sale since 2009. Indeed, Clearaudio claims that its original Concept deck, complete with tonearm and either Concept MM or MC cartridge, has sold over 20,000 units since its introduction. As tested here, with Profilur tonearm and Concept V2 MM cartridge, this combo retails for £3116, but that is far from the end of the story.

### PICK-UP AND MIX

How so? Because the Concept Signature is no longer a single model. You can purchase the turntable on its own, which will set you back £1200 in a standard finish comprising an MDF surround in either silver or black satin with a satin-finished top plate. Alternatively, a surround of high-pressure bonded solid wood layers, in either a light or dark finish, is £1450.

However, you can then go further and add one of Clearaudio's arms or cartridges, bagging a 2.5% discount or 5% if you opt for one of each. The company recommends arm models from its Verify to Profilur, plus all of its MM cartridges and MCs up to the Talisman V2 Gold. This gives a range of options from £2176 to £4826.

Although ostensibly similar to its predecessor, the Concept Signature turntable has some key changes under the skin. The main upgrade is a development of

the Optical Speed Control used on its more expensive decks, this time designated 'TCS' or Tacho Speed Control. This new system still monitors and corrects the platter speed but, rather than using a machined tacho disc and optical sensor, the belt runs around a second pulley beside the motor instead [see pic, below]. This is connected to a detector that supplies speed feedback to the control electronics.

The system checks itself automatically on each power-up, but there is also a button on the rear of the unit that initiates a full calibration sequence. Clearaudio suggests manual calibration should be carried out after extended periods of non-use or after any replacement of the Concept Signature's belt, which drives a polished aluminium sub-platter with tempered steel spindle. This rotates within a bearing housing based

around a sintered bronze bushing, running on a Teflon thrust-pad.

### READY, SET, GO

Atop the sub-platter is a 30mm-thick, 2.3kg main platter made from a high-density synthetic material. The 12V DC motor, meanwhile, is mounted into the plinth using Clearaudio's IMS (Innovative Motor Suspension) configuration – essentially six O-rings. A standard 12V plug-top PSU is supplied, but upgrade options are available.

Operating the Concept Signature is simplicity itself. The rotary switch of the older deck is gone, now replaced by a press button of similar size complete with vivid blue LED illumination. Consecutive presses cycle through standby, 33rpm, 45rpm and back to standby again – there is no longer a 78rpm speed option.

'Double bass was warm, woody and atmospheric'



RIGHT: CNC-machined alloy sub-platter is driven via a flat belt from a DC motor that's suspended via a series of O-rings. The belt is threaded around a second pulley that's part of the 'Tacho Speed Control' (speed monitoring)



ABOVE: Shown in its premium dark wood plinth, the Concept Signature is also offered in black and white colourways. The Profilur arm is seen here with the mid-range Jubilee MM

Clearaudio's Profilur tonearm (£1900 when bought on its own) is a relatively recent addition to the brand's stable. Described as an ideal link between the Satisfy Kardan and Tracer models, the arm is available in both black and silver finishes, and combines a horizontal sapphire bearing with a vertical ball bearing in an 'anti-resonance' housing. Aluminium alloy is used for the main armtube, damped at selected points along its length. The headshell is a basic support platform that bolts onto a slotted mount on the end of the arm – this mount may be rotated for optimum azimuth setup after loosening a screw under the armtube.

Vertical tracking force is applied by a simple threaded counterweight and bias by a rotary control, but neither is calibrated in any way. A stylus balance is therefore necessary and, while the manual gives a guide to 'minimal, medium and maximum'

anti-skating, there will be an element of trial and error involved.

The final element of our test deck is the evergreen Clearaudio Concept V2 MM cartridge [see PM's boxout below]. Further options available include a dedicated cover for £200, the £130 Concept clamp, and 12V variants of the Smart Power battery PSU (£790) or the transformer-based Professional Power linear PSU (£550). Given the dramatic effect the 24V version of the latter had on the Reference Jubilee turntable when last reviewed [HFN Oct '22], the Professional Power PSU would place high on my 'must consider' list.

### DECK OF DELIGHTS

Once in action the Concept Signature, Profilur and Concept V2 MM prove to be a superb turntable set-up. The combo has a reassuringly confident yet relaxed nature to its presentation, and was therefore one of

those 'tricky' review items – it occasionally became difficult to remember I was trying to assess it, because I was enjoying listening too much...

Furthermore, the Concept Signature is a 'Clearaudio' through and through. To my ears, the company's designs have never sought to provide the sort of impressive but short-term sonic fireworks that can become wearing. Rather, they offer an understated but inherently solid performance that seems more and more gratifying as different material is played.

### SILENT PARTNER

Key to this platform is the well-designed drive system that results in reassuringly low levels of noise when in operation. The Concept Signature is almost entirely silent and groove noise conspicuous by its near-absence. I was also impressed by the deck's speed stability, and the new TCS set-up for monitoring and regulating platter speed [see PM's Lab Report, p69].

With these bases covered, it became easy to just concentrate on the music, which Clearaudio's set-up delivered with aplomb. The sound was well focused in the space between the loudspeakers, the organisation of the soundstage beyond reproach even if I would have liked it to have spread its wings a little further past those lateral boundaries. Vocalists were placed centre-stage with an excellent sense of depth relative to their accompanying musical performers, making the Concept Signature instantly revealing of whether a recording had come from a grand studio or concert hall, or somewhere rather more intimate. ↪

### CONCEPT V2 MM

Also featured for over a decade in Clearaudio's catalogue, the Concept V2 is the least expensive cartridge in the company's extensive MM range and, as such, is the least expensive cartridge it makes. Clearaudio's range of moving-magnet cartridges was updated to V2 status in 2012 with improved resonance damping – the MM body is clamped within an alloy carrier [see inset picture] – more powerful magnets and boosted output voltage. The 3.3mV output level (re. 1kHz at 5cm/sec) is bang-on specification and our sample's 0.7dB channel balance is well within Clearaudio's 2dB target (>1dB will be audible). If you value a flat frequency response then the Concept V2 will impress with its tight  $\pm 1$ dB limits out to 14kHz, after which it rolls away to  $-6$ dB/20kHz (this is a long alloy cantilever, after all). The gentle high treble also suppresses high frequency distortion which clocks-in at just 1.8-4.5% ( $-8$ dB re. 5cm/sec, 20Hz-20kHz, stereo cut). Compliance is lower than we might expect from a MM at just 14cu, but still ideally suited to the Profilur arm [see Lab Report, p69]. Moreover, at the high 2.2g recommended downforce it tracks right through the top 80 $\mu$ m band and clears the maximum +18dB groove (re. 0dB at 315Hz/5cm/sec) at <0.7% THD. Roll on another ten years... PM



## TURNTABLE PACKAGE



**ABOVE:** The Profiler tonearm's counterweight is a tight fit but still decoupled from the tube's rear stub. Socket for the external wall-wart PSU is located near the on/off switch and recessed calibration mode button. Three feet [underneath] are adjustable

Firmly in the latter camp is Kari Bremnes' 'A Lover In Berlin', taken from her *Norwegian Mood* album [Kirkelig Kulturverksted ARS FXPL 221], where her vocals appeared to float between and slightly in front of my speakers. The level of emotion that this Clearaudio combo pulled from this seductively simple recording was a joy to behold.

### WINTER WARMER

On the other hand, the larger-scale action of 'Winter' from Vivaldi's *Four Seasons*, by the Virtuosi of England conducted by Arthur Davison [EMI CFP 40016], was a soaring delight. When everything broke into a crescendo, the Concept Signature rose to the challenge, conveying the sense of the orchestra in full flow.

The Concept V2 MM pick-up errs towards a slightly warmer balance, meaning that the crashing cymbals of this piece didn't have that last ounce of jump-from-your seat impact. A counter to this is that the vigorous playing of the string section never strayed into bright or brittle territory. Ultimately, then, the top end appeared well balanced, with the Concept V2 MM's solid tracking never missing a thing.

I was also taken by the way the Concept Signature could deliver instrumentation with a heightened sense of realism. Antonio Forcione's guitar strings on 'La Pasionara', from his *Heartplay* LP [Naim Records LP101], sounded almost alarmingly vivid while Charlie Haden's backing double bass was simultaneously warm, woody and atmospheric.

This package's £3000+ price tag doesn't make it a budget item, but the deck remains Clearaudio's entry-level design so there's always a risk that one might have to excuse a foible or two in order to justify the company's more exotic models. In practice its performance is in the

top drawer at this price, boasting impressive insight and poise, even if the likes of the Reference Jubilee reach another level. Lively basslines don't trip it up either, as evidenced by the fulsome sounds of Mark Ronson's 'Somebody To Love Me' [Record Collection RCA 88697736331], where the rhythm section sounded punchy and precise.

### UNTAPPED POTENTIAL

I couldn't resist swapping the Concept V2 MM pick-up for my regular Clearaudio MC Essence [HFN Aug '17] and was surprised by the uplift in performance. The Concept V2 MM is no slouch, despite being a 'budget' pick-up, but the MC Essence opened the door to a wider soundstage and a generally punchier sound, all the while illustrating what the Concept Signature turntable and Profiler arm have lurking in the tank.

It also added a welcome crispness to the high treble that is otherwise slightly muted by the softer balance of the Concept V2 MM. The good news, clearly, is that while the package reviewed here makes for a potent combination, there's still untapped potential to be realised. ⬇️

### HI-FI NEWS VERDICT

Clearaudio has played a blinder with its new Concept Signature range of turntable packages. The mix and match options are plentiful, allowing you to tailor a purchase to your budget and sonic preferences. Picking the Profiler arm and Concept V2 MM cartridge will give you a hugely enjoyable turntable set-up, while any future upgrades can be confidently picked from the Clearaudio catalogue.

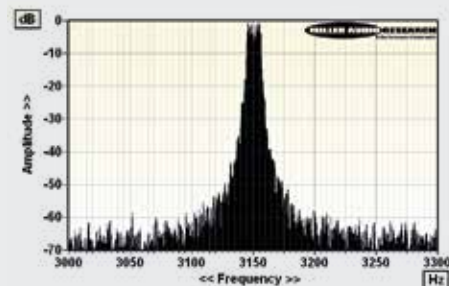
Sound Quality: 86%



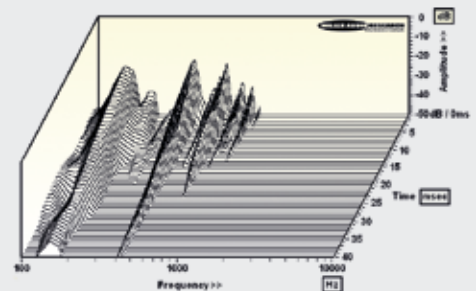
### CLEARAUDIO CONCEPT SIG.

Comparisons with the original Concept turntable [HFN Jul '10] reflect some of Clearaudio's modifications. Rumble, for example, is largely unchanged, with the through-bearing noise clocking in at -67.6dB (DIN B-wtd), the bearing itself a proven combination of a stainless shaft with bronze bushes and Teflon thrust pad. This bearing connects to a CNC-machined aluminium sub-platter with the 30mm-thick POM platter sitting atop, this providing sufficient isolation to reduce the through-groove rumble to -68.9dB. Audiophiles may wish to try an aftermarket felt mat – this will likely reduce rumble still further but its effect on sound will be less predictable. Speed stability is certainly improved over the original Concept, the new 'TSC' regime reducing the low-rate drift typically seen with DC motor solutions from a peak-wtd wow of 0.1% to 0.8% here [see Graph 1, below] – still higher than I'd like to see but at least the absolute speed accuracy is now bang on target (the -0.45% error reduced to +0.03% here).

The partnering 10in Profiler tonearm's lightweight alloy tube is aided by its 'naked' headshell in maintaining a relatively low 10.5g effective mass and is very well engineered despite a slightly higher ~20mg friction through its vertical ballrace than the <10mg achieved from its horizontal sapphire bearing. The easily manoeuvrable 'headshell' also enables uncomplicated fore/aft/azimuth adjustment. The straight tube has a usefully high 160Hz main bending mode, and although the harmonics/twisting modes at 420Hz and 690Hz are of moderate/high Q, Clearaudio's 'spot damping' ensures they typically dissipate very quickly [see CSD waterfall, Graph 2]. Modern tonearms, as illustrated by the Profiler, are a lot less 'lively' or prone to excitation than their forebears. PM



**ABOVE:** Wow and flutter re. 3150Hz tone at 5cm/sec (plotted ±150Hz, 5Hz per minor division)



**ABOVE:** Cumulative resonant decay spectrum for the 10in Profiler tonearm (100Hz-10kHz over 40msec) showing main mode at 160Hz and brief higher modes

### HI-FI NEWS SPECIFICATIONS

Turntable speed error at 33.33rpm	33.34rpm (+0.03%)
Time to audible stabilisation	3-4sec
Peak Wow/Flutter	0.08% / 0.02%
Rumble (silent groove, DIN B wtd)	-68.9dB
Rumble (through bearing, DIN B wtd)	-67.6dB
Hum & Noise (unwtd, rel. to 5cm/sec)	-56.9dB
Power Consumption	2W
Dimensions (WHD) / Weight	420x125x350mm / 7.5kg