

**AUDIO MILESTONES**

DELPHI • TURNTABLE • ORACLE • CANADA

# Oracle Delphi

Stellar performance and spectacular looks aside, this Canadian deck was arguably the first to break Linn's stranglehold on the turntable market and make it possible for other unconventional designs to follow. **Steve Harris** traces the story of the Delphi...

**K**nown for writing some of the longest equipment reviews in history, J Peter Moncrieff of *International Audio Review* is also remembered for one of the shortest and – for the manufacturer, sweetest – review judgements ever.

In 1979, after testing the prototype Oracle turntable, Moncrieff announced that this Canadian newcomer was '634 times better than the Linn'. Those were the days when a print review could make or break a product, and this one was the making of Oracle.

The turntable was the creation of Marcel Riendeau, then a philosophy lecturer at the University of Sherbrooke in Quebec. As a keen audiophile and musician, Riendeau had dabbled in audio retailing and distribution. He'd wanted to import a high-end turntable but could not find one that he thought was good enough, so he designed his own.

It was built with the help of his younger brother Jacques, who at the time was a mechanic working



**ABOVE:** Classic early Oracle with 'sticky' mat and suspension towers adjustable from the top

**BELOW:** Oracle founder Marcel Riendeau flanked by employees Julien and Bruno



on earth-moving plant, but would join the Oracle company officially in 1980. It was first unveiled to the public at a show in Toronto, but after the *IAR* review appeared, Marcel came back from the January 1980 CES show in Las Vegas with orders for 600 turntables. The brothers got into production as fast as they could.

## FLYING HIGH

'For Oracle, that review was the kick to fame,' remembers Ricardo Franassovici of Absolute Sounds, who was Oracle's UK distributor right through the 1980s. 'The turntable was a brilliant design, because aesthetically it looked very, very good. When set up properly and it had the right bearing – a bad bearing could mean quite a lot of wow – it would fly in sound!

'Most important, I think, Oracle was really the first turntable manufacturer that was able to break that Linn supremacy, leaving the door open for the SOTAs, the VPIs, the Goldmunds and the others.'

As for the design of the Oracle, Marcel Riendeau told US audio

writer Jonathan Valin: 'I did my own "philosophical study" of a number of the analogue pretenders to the throne of the time, from Cotter, Linn, Micro-Seiki, Thorens, Win, etc.'

His goal was to analyse the elements of a turntable and to ask how each should be designed to fulfil its necessary technical contribution without becoming part of, and adding to, the music that was being reproduced: 'As I saw it, the key was not for the stylus to play the record: it was for the stylus to play the groove!'

A key element in this was, of course, the use of belt drive with a suspended subchassis. The principle had been pioneered in America by Edgar Villchur in the Acoustic Research turntable of 1961 and adopted by Thorens of Switzerland around 1965. In Scotland, the Thorens design was copied by Ariston in a turntable which, by 1972, had become the basis of the all-conquering Linn Sondek.

But the Oracle's suspension layout departed from the AR/Thorens/Linn blueprint. In the classic Thorens, the subchassis sits on

three compression springs, placed equidistant from each other and from the centre spindle, sited under the edge of the platter. There is one to the left of centre while the other two lie between the arm board and the centre spindle.

By contrast, the Oracle seems to have owed more to the Win turntables, which in turn had similarities with the legendary, over-the-top Gale of the mid-1970s. Oracle followed these examples in dispensing with an all-enclosing plinth, and in having the three suspension points placed well outboard of the platter.

So two of Oracle's suspension towers were placed at the front and rear left corners of an acrylic baseplate, while the third one, as in the Win, was set far to the right, beyond the arm mounting. Each tower contained a bell-shaped spring in tension. Win, like Gale, had used acrylic for the subchassis as well as the base, but Oracle's magnesium/aluminium alloy component was far more elegant.

### DAMPING RING

While a Thorens or Linn platter consisted of two parts, which damped the metal's ringing tendency, the Oracle's one-piece aluminium platter relied on a neoprene damping ring, called a Peripheral Wave Trap, around the outside. Underneath, an inner rim was machined for the belt to ride on. The motor and its pulley were neatly concealed directly behind the centre bearing.

In pursuit of 'groove isolation,' Oracle offered its special screw-down record clamp, shaped so that



**ABOVE:** Through the generations – these *HFV* cover stories featured the Delphi Mk III (November 1987), Mk V (July 2004) and Mk VI (August 2010)

**BELOW:** Review of the Delphi Mk IV from the September 1990 issue of *HFV* (left) and of the original deck, from *HFV*, March 1981. The earlier review refers to the deck as the Oracle, saying that it is to be called the Delphi in America

only its rim applied pressure to the record. A small tapered washer around the spindle supported the record centre, so that when the clamp was tightened it would press the record, progressively from its edge inwards, firmly on to the seemingly-sticky soft polymer mat.

The clamp was a vital part of the design. Moncrieff had devised an impulse test measurement that was supposed to assess the way vibration from an external shock at the edge of the record travelled across it to be picked up at the stylus, and it was in this test that the record-clamped Oracle had particularly excelled.

The original AC-motor Oracle soon became the Oracle Delphi Mk I, using a pancake Papst DC motor, because the original AC motor could not be adapted for European and Asian markets. The early type of main bearing used a teflon or nylon bush, which could give trouble when the turntable reached hot and humid areas, and it was quickly replaced by a lead/teflon bushing system, which continued for the Mk I and Mk II.

In the suspension, the AC model and the early Mk I used an open-cell foam ring to decouple the spring holder from the suspension housing, but towards the end of Mk I production this was replaced by the Sorbothane spring damper which is still used today.

Next, Oracle launched a 'super' version called the Premiere, along with its Finale tonearm. The Premiere had a larger acrylic base while its motor had a 1lb flywheel and was fed from a special external power supply. In 1983 Oracle added a simpler, lower-cost turntable too.

Called the Alexandria, this used a subchassis concealed in the plinth.

In 1984 came the Delphi Mk II, using the motor system first seen in the Premiere, along with other improvements. The acrylic base was thicker, and smoked instead of clear. The suspension springs were now fitted with a new adjustable sleeve which allowed more precise setting.

### rites of Spring

It was easy enough to level the turntable using the screw adjusters on top of the spring towers. But tuning the suspension to make it behave properly, so that it would bounce straight up and down on all three springs at a rate somewhere

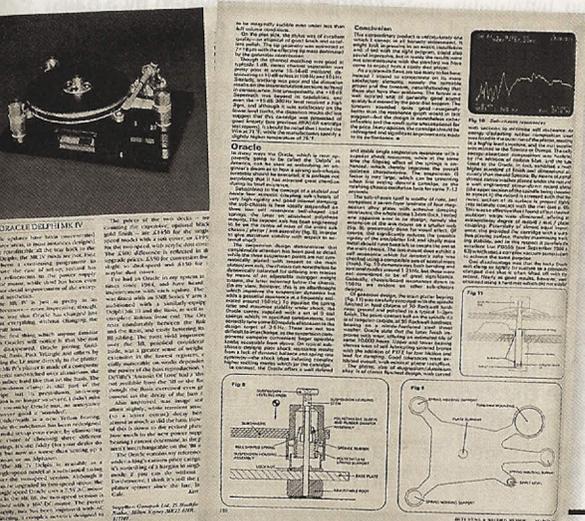
near the intended 3.5Hz, could become a complicated business. Oracle's suspension layout, with one spring far out on

"This Canadian newcomer was '634 times better than the Linn'"

the arm side, made it necessary to use springs of different strengths, even with a lightweight arm fitted. Essentially, there would be a weak one at the front left, a medium one at the rear left and a stronger one on the right.

Seven grades of spring were available, colour coded with a paint spot. From weakest to strongest, they were Grey, White, Yellow, Red, Green, Blue and Black. Turntables left the factory with one White, one Yellow and one Green spring, to suit low- and medium-mass tonearms. If you wanted to fit a heavier arm, you would need to change the springs, which involved quite a lot of disassembly, and find the right combination by trial and error.

But the resonant frequency displayed at each suspension ⇨



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point would be determined by the strength of the spring and the mass suspended from it. So in Oracle's tuning procedure, from the Mk I onwards, the addition of mass to the right point on the subchassis went hand in hand with spring selection.

For this, Oracle supplied two accessory weights, one of 4 ounces and the other 8 ounces, either or both of which could be clamped to the underside of the subchassis by a carrier rod attached to the bearing housing, in any position 'around the clock' in relation to the centre bearing. Before installing a weight, you needed to discover the best position for it by trial and error, by placing it on top of the platter and checking that the springs gave a smooth up-and-down movement without rocking or twisting.

## NEW PILLARS

As time went on, Oracle got a lot of feedback from customers frustrated by trying to understand the Delphi setup procedure. With the Delphi Mk III, introduced in 1987, the suspension pillars were made non-adjustable, which was because Oracle had found that users were 'cheating,' leaving out important steps in the suspension calibration, and just setting the height of the towers by using the levelling knobs.

But for the Delphi Mk IV, which was launched in 1989, the suspension was redesigned for easier setup, and no longer required the

### DELPHI MK I

The Delphi is an remarkably handsome work of art. Oracle's reference to its precision was not exaggerated to a level that the industry is used to. Oracle's reputation for quality, reliability and precision, the Delphi further demonstrated its ability to deliver the best edge position for another decade.

Improving on Oracle after another record playing system in the industry, you will hear all the fine nuances contained in your records.



The appearance of the Oracle is elegant, exotic, legendary...

### DELPHI MK II

History of the DELPHI turntable:  
 • Oracle AC model from 1979 / 1981  
 • Oracle Delphi MK I from 1981 / 1984  
 • Oracle Delphi MK II from 1984 / 1987  
 • Oracle Delphi MK III from 1987 / 1989  
 • Oracle Delphi MK IV from 1989 / 1994  
 • Oracle Delphi MK V from 1994...



### DELPHI MK III

The Delphi MK III is an improved and refined version of the two previous Delphi. But set new standards in sound quality which was first introduced in the beginning of the 1980's.

The MK III was even more beautiful and sturdy than the previous, which was a standard in the line.

Comments such as "very clean", "superb", "classical", "clearer than it performs", "very transparent sound for full orchestra" and "total tonal detail" were not in vain.



### DELPHI MK IV



### PARIS

There are only a few ways you can engineer a turntable. The difference are with the sensitive materials and construction of different philosophies to produce the desired goals.

For the Paris you will experience a noticeable increase in the level of the sound quality of the performance for the high level of its performance. It has allowed to them and again, to obtain a noticeable increase in the level of the sound quality.



History of the PARIS turntable:  
 • Paris MK IV 1991 / 23 cm  
 • Paris MK V 1992 / 23 & 45 cm

**RIGHT: Pages from the Oracle website's '25th anniversary' section, which covers the Delphi up to the Mk IV. Also pictured is the Oracle Paris, which was in fact first launched in 1989**

**BELOW: Showing the construction of the Delphi suspension system and main bearing, prior to the changes made with the Mk III**

complicated choice of different springs. This was achieved by adding a 1.2kg (3lb) counterweight to the underside of the subchassis, on the side opposite the tonearm.

It seems that here Oracle had officially adopted an idea first implemented by California retailer Brooks Berdan, who'd become well-known as an Oracle setup guru first at GNP in Pasadena and then at his own store in Monrovia, CA. Berdan had fitted many earlier Oracles with his own U-shaped weight around the main bearing.

Although the screw-down record clamp was retained, the Mk IV dispensed with the old 'sticky' mat. A new laminated platter, a sandwich of composite material and aluminium, carried a hard polymer mat, slightly dished upwards at the edge. It was now claimed that the clamp could be used effectively without the central washer around the spindle.

Finally, the turntable now used a high-quality low-voltage AC motor, made by Berger Lahr in Germany, and for the first time a single-speed version was made available as a lower-cost option for those who didn't want to play 45s.

While the Delphi continued, 1989 brought the launch of a new basic model, the Paris, its subchassis supported not on springs but on fibreglass rods terminating in Sorbothane rings. Again, future modifications would see the Paris progress from Mk II and so on.

In 1990, Oracle moved from Sherbrooke, Quebec, to a new

factory in Verret, New Brunswick. But after the expansion of the 1980s, turntable makers found the going tougher as CD took hold, and Oracle actually ceased manufacturing in 1994. However, production was soon re-started back in Sherbrooke, under the auspices of a new business entity, Agence Commerciale, which

was set up by Jacques Riendeau with former Oracle employee Robin Blanchard and new investor Michel Bernier. Meanwhile, Marcel Riendeau left the audio

**'Oracle found that users were 'cheating' during setup'**

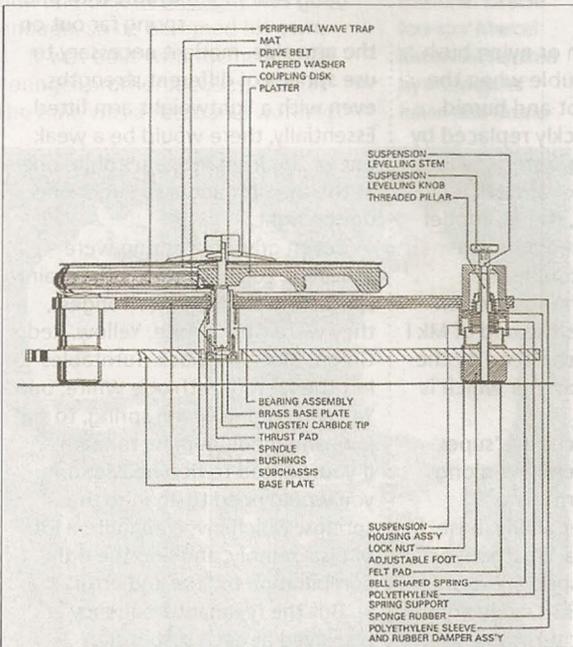
business and re-oriented his career as a consultant working between Canada, Germany and the UK.

## DELPHI V

From the new Oracle operation, in 1996, came the Delphi V. Outwardly, the obvious change here was the disappearance of that little control panel at the front edge of the plinth. Instead, switch-on and speed change were provided by a pair of long control fingers extending forwards from the drive electronics housed underneath the subchassis.

For better start-up, this new drive module provided the low-voltage AC motor with a high current, which was automatically reduced to give optimum drive once up the platter got up to speed. Meanwhile, the optional Turbo power supply gave further claimed improvements, acting as mains power cleaner.

Although the Mk V would remain in production until 2009, the Berger Lahr motor was soon replaced by a new one sourced from Crouzet in France, because the German



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MARC PHILIP: WWW.MAGAZINEAUDIO.COM



**LEFT:** Now a treasured item in Jacques Riendeau's personal collection, this beautiful black and gold 1985 Delphi Mk II fitted with a rare Denneisen air-bearing arm once belonged to a noted Quebec retailer, the late Pierre Charest

company had discontinued it. Meanwhile, in the Mk V's new main bearing, conventional bushings were replaced by a system of six contact points, formed by Delrin screws, said to prevent the rolling effect of the spindle within the bushing.

In a subsequent change to the suspension, Delrin suspension pillars replaced the previous metal ones, with a claimed improvement in terms of quieter backgrounds. The record clamp was also improved with a Delrin bushing.

Even now, the changes were retrofittable. For example, the new bearing could be fitted to a Mk IV, though earlier turntables would need machining to accept it. Similarly, the Delrin pillars were interchangeable with the nickel-plated steel parts fitted to Mk III and Mk IV and early Mk V decks, but replacing the aluminium pillars of earlier models would entail cutting new screw threads in the feet. In fact, says Jacques Riendeau, 'All

Oracle turntables can be retrofitted to the latest model; however, this might not always be cost-effective!'

In 2001, Jacques Riendeau bought out his partners with the help of a Korean investor, Simon Lee of April Music, to create Oracle Audio Technologies. This new partnership lasted until 2003, when Jacques decided to leave.

### THE MK VI...

As it turned out, he wouldn't be away for too long. In 2005, Stephane Nadeau, who'd had a long involvement with the products as he was the owner of the machine shop that made most of Oracle's metal parts, bought 51% of Oracle Audio Technologies from Simon Lee. Later, in March 2009, Stephane Nadeau approached Jacques to see if he was interested in coming back. Eventually, Jacques reached an agreement with the Korean partners to buy the remaining 49%, and so, at the end of 2009, he re-joined Oracle

as co-owner and chief designer. The tangible result of his return was the Delphi Mk VI.

As you'd expect, this came with some significant enhancements. The main bearing was improved over the Mk V, with contact points now made of a harder Delrin/Teflon material, as was the thrust pad. A more massive subchassis meant that the arms to the suspension points were shorter, and gave a wider support for the arm mount, while an extra thickness of aluminium to the left took the place of the Mk V's counterweight.

Above all, there was a change to the suspension, with adjustable damper units added next to each suspension tower to form Oracle's Micro Vibration Stabilizer system.

Under its glossier-than-ever skin, the current Mk VI is certainly rather different from the 1979 original, and the various irritations of earlier versions have been surgically treated or smoothed away. Here is one great audio icon that has retained its stunning good looks, and kept audiophiles swooning over them, for nearly 35 years now.

And that's an achievement. ☺

**BELOW LEFT:** Oracle came up with a simpler turntable, the Alexandria, in 1983. Ricardo Franassovici of Absolute Sounds, who distributed Oracle throughout the 1980s, commissioned this stunning artwork poster

### ORACLE DELPHI TIMELINE

- 1979 First Oracle turntable built by Marcel and Jacques Riendeau
- 1980 Oracle Delphi Mk I with DC motor supersedes Oracle AC model
- 1981 Premiere introduced, with Papst DC motor and external control unit
- 1984 Delphi Mk II introduced
- 1987 Delphi Mk III introduced with non-adjustable suspension pillars
- 1989 Delphi Mk IV introduced with easier setup
- 1990 Oracle moves to New Brunswick
- 1994 Production ceases in New Brunswick
- 1995 Jacques Riendeau forms Agence Commerciale ACI, with Robin Blanchard and Michel Bernier, in Sherbrooke
- 1996 Delphi Mk V launched by Agence Commerciale ACI
- 1999 Oracle CD transport and player introduced
- 2001 Corporate name change to Oracle Audio Technologies, with April Music acquiring majority share
- 2003 Jacques Riendeau leaves
- 2005 Oracle Audio Technologies acquired by Stephane Nadeau
- 2009 Jacques Riendeau buys back into Oracle Audio Technologies
- 2009 Oracle Delphi Mk VI introduced
- 2010 Paris turntable re-introduced
- 2012 New-generation digital products launched

