

CHORD SARUM T UMA PROPOSTA DE ALTA TECNOLOGIA

Jorge Gonçalves

AThe Chord Company é um fabricante de cabos com vários anos de existência no mercado de áudio e que por vezes é confundido com a Chord Electronics que, como o nome diz, produz equipamentos electrónicos de qualidade e é mais conhecida, muito em especial, nos tempos mais recentes, pelos excelentes conversores D/A que tem lançado.

Os cabos de que vou falar hoje são uma versão de alto gabarito da marca, resultando da utilização do material de isolamento Tylon, considerado pela marca como tendo propriedades superiores em relação ao Teflon, nomeadamente obviando às instabilidades de fase e às vibrações mecânicas desde último. Os Sarum T resultam da utilização combinada da tecnologia de melhoramento de geometria ARAY com o Tylon, daí a letra final T. No domínio da alta-fidelidade, a Chord é o único fabricante a utilizar este sofisticado, e bem caro, material de isolamento. Os cabos de interligação podem ter terminações DIN, XLR e RCA e são sugeridos comprimentos de 1 metro, com um custo adicional por cada metro a mais. Os Sarum T para colunas utilizam a mesma tecnologia de isolamento e reforço estrutural e podem ser fornecidos terminados de fábrica em comprimentos de 1,5, 3 e 5 metros, sendo a terminação mais normal feita com fichas banana em ambas as extremidades. O acabamento externo é numa bela cor branca, uma originalidade em relação à maioria dos tons escuros de outros fabricantes.

Ensaio prático

Uma vez que já tinha estabelecido uma muito boa relação com Martin Cobb, responsável global de vendas da Chord, o teste apareceu como uma sequência natural da recente nomeação da Exaudio como distribuidor da marca para Portugal. E foi



assim que não me surpreendeu nada que o João Pina, da Exaudio, me tenha telefonado a informar que tinha consigo uns cabos Sarum T para eu «dar uma voltinha». E lá vieram então um par de cabos de coluna com 3 metros cada e um par de cabos de interconexão com 2 metros. Embora os cabos de coluna estivessem equipados com fichas banana em ambas as extremidades, isso não causou qualquer problema porque os terminais das Quad e das Kef (pelo menos a edição especial que tenho comigo) têm um furo mesmo à medida (diâmetro de 4 mm) e os do amplificador de potência da Constellation são suficientemente generosos para aceitar quase tudo o que se lhes queira ligar.

Diversas viagens, umas quase coladas às outras, fizeram com que decorresse algum tempo até que os cabos se integrassem no meu sistema, mas também começo já por confessar que, depois de instalados, nunca mais os tirei, mesmo quando recebi o Naim Uniti Nova e resolvi que devia continuar com os cabos de coluna, tão boa tinha sido a impressão anterior quando os tinha colocado entre as saídas do amplificador de potência Constellation Inspiration 1.0 e as minhas Quad ESL63,

tendo o cabo de interconexão sido ligado entre a saída do leitor de CD's Accuphase DP85 e o prévio Inspiration.

Testar um conjunto de cabos é algo que exige alguma ginástica mental, em termos de ter de ensaiar diversas combinações para ter a certeza sobre quais os efeitos exactos da sua utilização e tecer considerações individuais sobre cada um deles. Claro que experimentei primeiro uns e depois os outros, isto por comparação com os meus Kimber Select, de preço assim não tão diferente. Mas, em termos globais, não tenho problema nenhum em avançar desde já que as características sónicas de cada um dos cabos não são assim tão divergentes, razão porque me vou a referir a elas em conjunto, sem menções individuais.

E aquilo que salta imediatamente ao ouvido é a interessante frescura que o som do sistema de áudio adquire quando se usam estes cabos. É como se se abrisse uma janela e entrasse uma lufada de ar fresco e puro que quase perfuma a sala de audição, isto sem de qualquer modo colorir a música. A correcção tímbrica é algo muito evidente e o equilíbrio dinâmico é outro dos pontos fortes destes cabos.



O disco *Crescent*, de John Coltrane, não é bem um daqueles que tem uma dinâmica explosiva e ampla, mas existe na maioria das faixas um equilíbrio natural entre os crescendos e os momentos de quase silêncio, que funciona muito bem do ponto de vista de nos pôr a bater o pé e a apreciar cada melodia. Com os Sarum T o som do saxofone tenor de Coltrane soa bem cheio e como que vindo da garganta, e o piano de McCoy Tyner tem toda a graça e beleza que um piano pode ter no jazz. Mas, ao mesmo tempo, o baixo de Jimmy Garrison é cheio, imponente, mas sempre muito ritmado e quase com cheiro a madeira, com a bateria a imprimir uma batida bem enérgica através dos bombos e os pratos desta a soarem limpos, bonitos, sem qualquer sinal de exagero. Olhando noutra direcção,

o palco sonoro era muito bem definido, com uma agradável sensação de arejamento e de precisão de localização de cada instrumento.

Toda esta sensação de frescura e alegria esteve novamente patente no marcante arejamento e elevação com que o Concerto para Violino e Orquestra de Tchaikovsky, foi reproduzido, com a deli-

neação de cada um dos naipes da orquestra a dar origem a linhas quase perfeitas entre cada secção, dando origem a um equilíbrio quase perfeito entre a imagem perfeitamente delineada, quase holográfica, do violino de Anne-Sophie Mutter e a apresentação realista, espacial e dinamicamente convincente da orquestra.

Comparados com os meus Kimber Select, não tão dissimilares assim em termos de preços, os Sarum T não se deixam ficar atrás, embora apostando num equilíbrio de qualidades relativamente diferente. Os Kimber são igualmente muito bons no que se refere à apresentação da imagem espacial, têm uma gama média do mais bonito que há, e os graves são seguros e imponentes. Como já disse, os Sarum T apostam numa frescura da gama média, numa ampla e vasta imagem espacial e apenas perdem por muito pouco em relação aos Kimber Select no domínio da reprodução do grave. Estes cabos da Chord produzem um som sofisticado e refinado que ronda o intimismo com a música e nos convida a efectuar longas sessões de audição musical, o que nunca deixou de ser um bom sinal.

Conclusão

Embora não se possa dizer que cabos com preços que rondam os 2000 euros são necessariamente baratos, tenho que reconhecer que, quando se faz o balanço entre qualidades intrínsecas e preço, os Sarum T não ficam nada mal. Têm um som que não põe pozinhos de perlimpimpim na música, antes pelo contrário, conferem-lhe alegria e frescura, não se intimidam perante os fortes crescendos energéticos, serão seguramente muito bem-vindos num sistema de áudio de boa qualidade. A ouvir em breve por quem ainda não teve oportunidade de o fazer até agora.



Cabos de coluna e de interconexão Chord Sarum T

Preços:

Cabo de interconexão RCA/RCA, 1 m 2402 €

Cabo de coluna, 1,5 m 2059 €

Representante Exaudio

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ANO 18
MAIO 2014

200

EDITORA
CAVI

clubedoaudioevideo.com.br

R\$18 €9



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CABO CHORD RCA SARUM TUNED ARAY

XX Fernando Andrette
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A primeira versão do cabo Sarum, o top de linha da Chord, foi publicada na edição 179 de junho de 2012, e o teste foi feito pelo nosso ex-colaborador Ricardo de Marino. Sugiro aos futuros interessados nessa nova versão que leiam o teste, pois a primeira versão também já era excepcional em termos de preço e performance! Antes de descrever o que é a tecnologia Tuned Aray, é importante falar da construção e acabamento do cabo Sarum. A Chord levou duas décadas para apresentar seu primeiro cabo capaz de concorrer com qualquer cabo Estado da Arte existente hoje no mercado. E ainda assim, conseguiu uma excelente relação qualidade, custo e benefício, colocando em xeque muitos cabos concorrentes que possuem performance similar ao Sarum, mas que custam até quatro vezes mais. A filosofia desse fabricante sempre foi de oferecer ao mercado produtos justos com uma performance muito honesta: um dos maiores exemplos é o cabo digital Prodac VEE 3, de menos de 500 reais, que oferece uma performance de um produto categoria Diamante! Em todas as minhas consultorias trocadas diariamente com nossos leitores, quando a questão é um bom cabo digital para um conversor ligado a um computador, não tenho dúvidas: sugiro o Prodac VEE 3.

Voltando ao cabo Sarum, ele é um multi-stranded de cobre OFC, banhado a prata, com isolamento PTFE (Teflon). O que muda em relação a outros cabos tops, é que no Sarum cada fio de cobre é polido individualmente, até sua superfície tornar-se homogênea! Outra sacada dos engenheiros da Chord é que em testes auditivos /

comparativos, eles chegaram à conclusão que o Teflon era o melhor dielétrico para revestir cada fio. A escolha, após sucessivos testes, foi do Teflon espumado. Esse era o 'pulo do gato' da primeira versão, que fez um enorme sucesso mundial. A tecnologia Tuned Aray é um passo a frente em termos de construção, no cuidado com o polimento de cada fio de cobre e no isolamento que, segundo os engenheiros da Chord, agora é realizado em todo o cabo (no retorno primário e secundário do sinal). A blindagem externa também sofreu alterações, com a combinação de uma nova densidade de folhas de metais trançados, produzindo uma cobertura mais precisa e completa, sendo 100% eficaz e dez vezes superior ao modelo original! Outra mudança importante se deu na adição de um terceiro condutor, que está ligado a um dos plugs RCA: ele possui um comprimento muito específico, que resultou em um comportamento extraordinário no extremo das frequências.

Segundo o fabricante, de formas gerais essa nova geração tornou o novo Sarum mais transparente, possibilitando um equilíbrio tonal ainda mais correto, e melhorou substancialmente a velocidade e o silêncio de fundo. Talvez o Sarum de interconexão tenha sido o cabo que mais tempo ficou conosco em teste, e veio para não sair mais do nosso sistema de referência. Ele é uma espécie de 'coringa' nos nossos testes, ou, para usar um jargão futebolístico, é o nosso décimo segundo jogador! Para os dez meses de teste, o Sarum passou por todos os equipamentos avaliados nesse período, e gostaria de começar falando de uma de suas mais importantes qualidades: seu ▶



BEST INTERCONNECT CABLE

The Chord Company Clearway

BUILT BY HAND, the Clearway utilises The Chord Company's proprietary ARAY technology – originally developed for its Sarum range – to offer improvements in detail and transparency. It is available terminated with DIN or XLR plugs and can be custom ordered to any length. If the brief was to carry a sense of musical coherence and a high level of detail and dynamics, this Clearway interconnect more than delivers the goods. Bass lines are well extended yet punchy and tight, vocals are clear and well defined and

leading edges and natural decays are impeccable, leading to greater insight and involvement into all types of music.



PRODUCT DETAILS

PRICE £100 for 1m pair

TYPE Analogue RCA interconnect

DISTRIBUTOR
The Chord Company Ltd

WEBSITE chord.co.uk

REVIEW HFC 420





BEST CABLE LOOM

The Chord Company Clearway & Shawline

THE CLEARWAY SPEAKER cable features 14-gauge stranded copper conductors with FEP insulation in a twisted pair configuration. Meanwhile, the Shawline analogue interconnect utilises Chord's Tuned ARAY geometry originally developed for the company's premium Sarum range. In combination the cables

assist in conveying the atmosphere of more complex recordings, while preserving the strongest of rock/pop dynamics. Orchestras sound full and powerful, vocals are clear and lifted from the soundstage, and music is well-paced and full of excitement. It's a fine partnership.

PRODUCT DETAILS

PRICE £156 for 3m/
£200 for 1m

TYPE Speaker cable and
analogue interconnect

DISTRIBUTOR
The Chord Company Ltd

WEBSITE
www.chord.co.uk

REVIEW HFC 412/405



AVTech media
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BEST CABLE LOOM
THE CHORD COMPANY
CLEARWAY & SHAWLINE



BEST INTERCONNECT CABLE

The Chord Company C-Line

FEATURING TUNED ARAY technology originally developed for The Chord Company's flagship Sarum range, the C-Line's conductors are produced

from oxygen-free copper and constructed in a pseudo-balanced configuration with fully floating, high-performance shielding. Direct gold-plating tech and over-moulded strain relief is also adopted for the termination plugs. The result is a performance that manages to combine energy and refinement in a manner that's more commonly associated with silver conductors. Bass response is smooth and extended and performances are lively and energetic without ever feeling strained. The result is an interconnect with an involving character that is hard to beat at the price.



PRODUCT DETAILS

TYPE Analogue interconnect cable
PRICE £45
DISTRIBUTOR The Chord Company
WEBSITE www.chord.co.uk
REVIEW HFC 403

The Right Chord

Jon Myles brings together a one-make cable system from Chord to show how just such a consistent approach can pay dividends.

Apart from a few vocal sceptics, most hi-fi enthusiasts accept that cables can make a tremendous difference to a system. Even a moderately-priced set of components can be given a healthy sonic boost by choosing the right loudspeaker leads, interconnects or digital links.

But there's no getting away from the fact that products from different manufacturers all have their own trademark sound. Try a set of 'speaker cables from Company A and you might get more bass compared to one from Company B – but lose out on some pace and timing.

Add in interconnects from Company C and something might change again. Then bring in after-market power leads from Company D and you can see the sonic permutations start to multiply exponentially when you mix and match (if I'd paid more attention to my Business Studies statistics module at university I could probably give you some exact figures!).

An obvious solution is to build a coherent wiring loom from one company. The advantages are there's likely to be a house sound due to the use of similar materials and geometry of construction, the products will



Chord Signature Reference speaker cables.

have been designed to work together and there's the opportunity to move up the company's range in stages as funds allow.

Which led me towards choosing a set of cables from the Wiltshire-based Chord company's Signature range just to see how well this can work. Specifically the Signature Reference 'speaker cable, Signature Tuned Array XLR interconnects, Signature Array Power lead and Signature Super Array streaming cable

The set-up was simple: one system comprising a Cambridge Audio Azur 851N network player, McIntosh MC152 power amplifier

and Spondor D7 loudspeakers – a combination costing a shade over £10,000.

And then, for comparison, a rather more budget but still excellent set of components comprising an Oppo BDP-105D disc player, Creek Evolution 100A amplifier and Epos K3 floorstanding loudspeakers.

SOUND VALUE

Plugging the Signature Reference loudspeaker cables into the McIntosh/Spondor set-up immediately revealed what its intentions are. This is a cable that majors on timing, detail and openness: it allowed the McIntosh to convey all of its controlled power to the wonderfully detailed Spondor D7s.

Streaming Primal Scream's 'Screamadelica' (24/96) via the Azur 951N the female vocals on 'Come Together' rang out as clear as a bell, while Jesse Jackson's sampled concert speech was spine-tinglingly good.

I then added the Signature Tuned Array XLR interconnects between the Azur and the McIntosh, instead of a set of stock cables, and started to see the synergy of a coherent approach. The details and dynamics evidenced by the 'speaker cables became even more sharply focussed. Jackson's voice wasn't just there – it moved



Chord Signature Tuned Array XLR cables.

forward into the listening room and out and above the 'speakers. Perhaps most impressive was the way I could hear more into the mix and feel enveloped by the music.

Next, a pair of Signature Array power cables were used for both the McIntosh and 851N, instead of their stock leads. Here the improvement was more subtle – but noticeable. There was an obvious firming up of bass notes and a smoother midband. The low-end did not go any deeper but it did sound obviously more tuneful and rounded. This was something I became more aware of when I reverted back to the original power leads, hearing the sound take a step back.

Finally, using the Super Array streaming cable to go from my router to the Cambridge Audio Azur proved digital connections do make a difference. Some people still dispute this – but there are good reasons as to why it works (see this issue's Letters for a more detailed explanation).

Again the Chord built on all the qualities of its stablemates, bringing a better sense of timing and coherence to the mix. Dave Brubeck's 'Take Five' never sounds bad – but when you hear the syncopation and drum beats at their best it moves to a different level. With the entire Chord cabling in place this is just what happened.

All of a sudden the kick-drum halfway through the piece wasn't just a thwack – it actually punched me in the chest with its power, but did not linger to slow the tempo. Instead it was there like a bolt from the blue and then gone – an absolute stunning moment that elevated the track from merely good to spine-tinglingly

Chord Signature Super Array streaming cable.



Chord Signature Array power cable.



memorable.

Switching the entire cable loom over to the Oppo/Creek/Epos system proved even more instructive. It might seem a mismatch – cables costing around £3200 employed on the end of a £4000 set-up. But, actually, the increase in performance was quite startling – akin to upgrading each individual component to the next level.

The Reference 'speaker cable and Tuned Array XLR work together to give a much cleaner and sharper sound to the Oppo and Epos 'speakers. But most crucially they seemed to let the two breathe and open up. It's as though a constriction in the pipeline was removed and this let more of the essential elements of the music flow freely.

Wendy James's roar of 'Wooooaaahhh' at the start of Transvision Vamp's 'Baby I Don't Care' (a classic rock 'n' roll moment that never fails to make the hairs on the back of my neck stand up) was

visceral – her voice having just the right amount of edge.

Leading edges of guitars were also more distinct, while on massed strings I could hear the sound of bow on string, instead of just a wall of sound.

TUNED ARRAY

Chord's proprietary Tuned Array technology was originally developed for the company's digital cables – but it was soon found it also brought improvements to analogue interconnects and power leads.

It originated when Technical Director Nigel Finn was looking at ways to reduce reflections in digital coaxial cables – and found that adding a short additional tail to one end of the cable had a profound effect. An effect that was heightened when the tail was 'tuned' to the length of the cable.

It was then discovered that the same technique brought improvements to the company's RCA and XLR interconnects, streaming cables and power leads.

The beauty here is that with the Chord loom in place you can happily look to upgrade your components over time with obvious benefit.

Swap the Creek to something of the level of a McIntosh and the difference will be immediately evident, such is the transparency of the interconnects and loudspeaker leads.

On those terms, Chord's Tuned Array cable loom makes a very impressive long-term investment.

CABLES

Signature Reference Speaker: £900 2m terminated pair
Signature Tuned Array XLR: £1000
Signature Array Power: £550
Signature Super Array Streaming: £750

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Accessories

Best analogue interconnect over £50

Chord Company Clearway Analogue RCA

WHAT HI★FI?



AWARDS 2019

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Best analogue interconnect under £50

Chord Company C-line

WHAT HI★FI?



AWARDS 2019

Accessories

Best speaker cable over £15/m

Chord Company Rumour X



An Epic Affair

The Chord Company's new Epic XL loudspeaker cables are a class act, says Jon Myles.

It's fair to say the Chord Company covers just about every cable on offer - from digital to interconnects to the plain old loudspeaker lead. Except not all loudspeaker leads are built the same. You can go from one costing a few pounds per metre to something like their flagship Epic XL.

And when I say flagship I really mean it. They will set you back £600 for a set of two 1.5 metre terminated pairs (although, as ever, shop around and you can find them at a lower price).

The reason? Well the Epic XL combines elements of Chord's Epic and Signature Reference/XL speaker cables. A specially chosen soft PVC internal jacket is added to correctly space the shielding and minimise mechanical noise. A high density braid and foil shield is applied to each set of conductors and this in turn is protected by a translucent outer jacket, again chosen to reduce unwanted mechanical noise.

The conductors are also twisted together in a braid-like construction - and if that makes them sound a little

unwieldy then fear not. I found them easy to route even in the tightest of spaces and the quality of the banana plugs is exceptional - gripping tightly to an amplifier's 'speaker outputs.

At this price the Chord Epic XLs deserve to be used with top-notch electronics - so I plugged them into an Icon Audio Stereo 30SE valve amplifier feeding our resident Martin Logan electrostatics (a match made in audio heaven) with sources including CD, a high-resolution DAP (digital audio player) and streaming via Spotify, Tidal and tracks stored on my laptop computer.

SOUND QUALITY

The first thing I noticed when plugging in the Chords was the quality of the bass. No, it's not overpowering nor overly potent but simply potent and tuneful. It provides a solid foundation for all the instruments that float above.

Which means the guitars and vocals on 'Debaser' by The Pixies took on a greater presence - indeed Black Francis' lyrics were more intelligible with a less shouty character.

That's not to say the track loses any potency - it just sounds more together and characterful. Indeed the overall character put me in mind of my current cable of choice - Tellurium Q's Silver Diamonds.

No cable is devoid of an influence on the sound but - like the Telluriums - the Chords impose as little as seems possible and so let you know exactly what your amplifier, loudspeaker and source are actually doing.

Playing Arvo Part's 'Requiem For Benjamin Britten' the decay at the end seemed to go on longer than I remembered on previous hearings but retained its perfect tonality.

This is what the Epic XLs do so well - they allow the music to flow without imposing too much of their own character. As such they represent an excellent buy.

CONCLUSION

I've no hesitation in saying these are some of the best cables I have heard from the Chord stable. No loudspeaker lead is perfect but these will certainly bring the best from your system. Plug in, listen and enjoy.

**CHORD COMPANY
EPIC XL £600 PER
1.5 METRE PAIR**



**OUTSTANDING - amongst
the best**

VERDICT

Open, tuneful and devoid of artificial sound. Rather hefty but easy to route.

FOR

- open
- tuneful bass
- lack of colouration
- construction

AGAINST

- not cheap
- stiff competition

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The Chord Company ChordMusic



ISIS LX168用上純銅導體，音色溫暖濃厚，有着一份讓人聲重現得圓潤厚壯的討好。我猜想以這款喇叭線來重播出「One Day More」，即使空間的清晰開揚感、分隔度、聚焦力未能及得上ChordMusic，但人聲的表現也許可立於不敗，從而跟ChordMusic平分秋色。的確，在直接AB比較下，ISIS LX168的濃厚人聲確實討好，有着一份能於瞬間把聆聽者吸引着的悅耳性。只是在細心欣賞歌聲時，我們可不難發覺到在ChordMusic手底下，歌聲有更率直真實的還原，清澈明確，鏗鏘有力，在歌曲中後段強音處，歌聲更能爆發出能量和激情，唱出無遮無掩的真性情。就是聽Eponine的單人獨唱「On My Own」，ChordMusic能在更少修飾美化下透現出一份更傷心失落的應有感情來。

從ChordMusic重播《Les Miserables Live!》的表現可推想得到，這款喇叭線對於複雜大場面大動態的古典錄音重播亦會十分擅長。就揀來Bas Pollard指揮荷蘭的交響樂團Utrechtsch Studenten Concert《Dynamic Experience Classics Volume 1》，重播史特拉汶斯基「火鳥」，強勁的低音鼓打響第一個音符，鼓皮厚韌有彈力，餘響震動而出，在氣勢強勁之餘低頻還保持著一份乾淨俐落，相當結實，不容緩慢猶豫，沒有絲毫贅肉，此外，弦樂群擦弦有力，翻起一浪接一浪的波濤，右邊低頻弦聲貼地而來，還有凌厲響亮的銅管和鏗鏘明快的敲擊，再加上廣闊高深的大音場，確實精彩絕倫！再聆聽一下這CD中的其他靚錄音，普羅高菲夫「Cinderella: Suite no.1, deel 3」亦來得相當強勁具氣勢，充滿動感，弦樂、銅管、敲擊、鼓此起彼落，位置明確，層次分明。Aaron Copland「Gun Battle」鼓擊快密，打得落力，震動人心。

欲罷不能，我再找來動聽但亦不易播得好的複雜大場面大動態古典錄音來讓ChordMusic發揮。其實擅於重播這些錄音的不單只是ChordMusic的喇叭線，還有具備同樣性格與能力的同型號訊號線及數碼線。

重播史維特蘭諾夫指揮俄羅斯國家交響樂團《天鵝湖》第17 track「Dance russe」，小提琴凝聚高企，細緻分明，玲瓏浮突，中後段強音齊奏時，樂團在音場後方排開來，小提琴依然穩站前方抑揚昂首，既激情澎湃，亦美妙動人！重播第18 track「Dance espagnole」，在大空間中的明快起勁敲擊，乾淨俐落，位置分明，使我聽得精神奕奕。ChordMusic就是這樣把複雜的大場面條理分明地排列出來，而小提琴的細緻靈巧處亦活靈活現，明顯超越更換喇叭線前。還有的是，從舊有沿用的喇叭線換上ChordMusic後，聆聽以上多首錄音時，我們聽到更多高頻空氣，以及音場頂部的空間，多逾兩成！

ChordMusic在複雜大場面大動態古典錄音上的傑出表現，當然還可以在Krystian Zimerman指揮Polish Festival Orchestra「蕭邦第1鋼琴協奏曲」的重播上體會得到。

ChordMusic喇叭線的音響個性跟ISIS LX168有着明顯不同，在音色上，含銀跟純銅導體當然有着分別，而分析力、速度、控制力的高低，亦反映在售價上。不過，讀者要了解ChordMusic喇叭線的音響個性，猜想它跟自己家中器材的合拍程度，也可從廠方接線的音響取向入手。

我從多年前聆聽過Chord當時的頂級型號Solstice訊號線和電源線，以至不久前的頂級型號Sarum Super ARAY訊號線和電源線，雖然都不是喇叭線，但聲音取向跟ChordMusic喇叭線依然如出一轍，走着清晰分明、爽朗結實、低脂低糖的路線；是Chord發燒線一直以來的鮮明方向。

在試音時我們把ChordMusic喇叭線放於Hegel H30功放至B&W 802 D3揚聲器之間，覺得三者配合得非常好，彼此個性互補長短，發揮出極高水準來。喇叭線的聲音清晰光亮，起落高速，結實有力，聚焦力強，低頻乾淨俐落，正好為聲音較溫暖飽滿的功放調節出更清晰明快、層次分明的表現。當然，喇叭線的強大電流傳送能力亦能讓功放本身的強大能量得以充份發放，高速爽朗，無低頻贅肉，弱音細節與高頻不會在不經意中被蠶食。

(輯錄自本刊第366期 / Megan)

零售價：HK\$68,600 (3M pair) 總代理：新漢建業有限公司

X Marks The Spot

Chord Company's new RumourX loudspeaker cables make a big impression on Jon Myles.



An £18 per metre price-point for loudspeaker cables is a bit of a sweet spot for many buyers. It takes you into a new area compared to cheaper connections, by using better materials and construction.

If you've got a pair of basic 'speaker cables in a lower cost bracket, upgrading to something a little more exotic has the potential to wring extra performance from your amplifier and loudspeakers.

And this is what Chord Company's new RumourX is intended to do. They replace the existing Rumour cables and use design elements trickled down from their high-end SignatureXL leads.

Chief amongst these is the use of XLPE (cross-linked Polyethylene) as the dielectric that Chord Company say has superior phase properties to the PTFE (or Teflon) material used in the original.

Internally Chord uses silver-plated high purity copper conductors, twisted together to improve interference rejection and covered in a flexible white PVC outer jacket. They are fitted with the company's new classy-looking ChordOhmic banana plugs (spades are also available), designed to extract the most electrical and sonic benefits from cables using silver in their construction.

Taking these RumourXs from the box it was immediately noticeable just how thin they look. The diameter is just 6mm with an AWG of 16 – meaning they are easy to route and

pretty unobtrusive when in situ.

The ChordOhmic plugs grip binding posts firmly for a tight connection which isn't going to work loose any time soon. Indeed it takes a firm pull to get them free when changing loudspeakers or amplifier.

The cables are also directional – with a small arrow indicating the ideal direction of travel for the signal. I know many people are sceptical about the benefits of this – but if the manufacturer recommends running cables this way I've always found it best to follow their advice.

SOUND QUALITY

While the RumourX may look rather slim its sound is anything but. In true Chord fashion this cable has a crisp, sprightly and dynamic sound to it, with good punch in the lower registers.

Nothing is over-emphasised: everything is laid out with aplomb. On David Bowie's 'Heroes' the epic sweep of the song came across loud and clear through a pair of Focal Kanta No 1 standmount loudspeakers. There was rhythmic assurance to the presentation that translated into a good sense of drive.

Gentler music, such as Barb Jung's 'Stockport To Memphis' (24/96) collection had excellent tonality, Jung's smoky jazz voice hanging in the air between the 'speakers with excellent presence.

Detail was comparable to some cables costing a good deal more.

The RumourXs are not totally neutral, erring slightly towards a lively presentation that suits upbeat tracks particularly well. But that doesn't mean they can't do delicate when needed as a spin of Arvo Part's 'Tabula Rasa' proved. Here piano and strings came over with a haunting, calm quality with plenty of space around the instruments.

CONCLUSION

The original Rumour loudspeaker cables have been a mainstay of the Chord range for many years but these RumourXs are a worthy successor. They have a lively yet well-balanced sound that will suit many a system. Add in a realistic price and they make an excellent choice.

**CHORD RUMOURX
£18 PER METRE**



OUTSTANDING - amongst the best.

VALUE - keenly priced.

VERDICT

Dynamic, punchy yet possessing great poise and detail. Chord's RumourX is a cable with the ability to improve many a system.

FOR

- dynamic
- detailed
- well-balanced
- easy to route

AGAINST

- not entirely neutral

The Chord Company
+44 (0)1980 625700
www.chord.co.uk

The Chord Company ShawCan

The Chord Company's has been around since 1984. An interesting story: The company was founded following a dinner meeting between NAIM Audio USA retailers and NAIM Audio UK. The USA representatives needed a DIN-to-RCA interconnect. Sally Gibb (the company's lead designer) attended the dinner with her husband, then a NAIM Audio executive. He suggested that Sally make the cables for the USA reps and launch her own business. As a result, The Chord Company was born and has built a growing reputation for producing sonically superior cables ever since.

The ShawCan headphone cable is the newest addition to Chord Company's Shawline range. The cable features "high-quality" silver-plated conductors and the firm's own "Super ARAY conductor geometry". It uses a PTFE dielectric and a carbon composite shield that "minimizes unwanted mechanical noise". It's all too easy for headphone cables to produce noise from rubbing against desks, clothes, or equipment, so it's important for cables to minimize mechanical artefacts where possible. The conductors are housed in a black outer-jacket that feels like techflex. Chord Company states it's "more than just a braid to tidy the conductors," but also is "designed to assist with acoustic damping." ShawCan cables are extremely light, making them ideal for use with heavier headphones.

Chord Company's focus on mechanical details is matched by their attention to musical detail retrieval. The ShawCan cable is strikingly resolute, especially considering its comparatively modest price. The ShawCan is neutral leaning, with a slight tilt towards darker harmonics. The overall sound isn't dark however; perhaps saying it's the antithesis of bright might work. Its handling of percussive elements is tight and hard-hitting. Guitars and strings are colorful and airy. Vocals are lifelike and very realistic in tonality and scale. In short, ShawCan offers more performance than it has a right to at its price. **Michael Mercer**

Price: £275 - 1.5 meter

MANUFACTURER INFORMATION

The Chord Company Ltd

Chord Company House, Millsway Centre, Amesbury,
Wiltshire SP4 7RX, UK

URL: www.chord.co.uk



Striking the right Chord

Chord's new Shawline range brings the company's Tuned ARAY technology into a new price range. Jon Myles plugs them in and loves the sound.

The Wiltshire-based Chord Company certainly made an impact with the launch of their

Tuned ARAY cables interconnect and digital cables. Developed by their renowned designer Nigel Finn they used a unique geometry and superior materials to bring out the spatial elements in music while retaining the timing and essential rhythmic vibrancy.

Listening to the first iteration of this technology I was supremely impressed with its clarity, openness and, most of all, level of detail on offer. One problem, however, was the cost – the Tuned ARAY first appearing in the high-end Sarum interconnects.

However, the development is now starting to trickle down throughout the Chord range and has been implemented in its new Shawline series. Analogue and digital interconnects are available as well as a dedicated loudspeaker cable. The latter features silver-plated conductors, 16 AWG multi-strand silver-plated conductors allied to a PTFE insulation.

All the leads have been designed to work together to give a signature sound which means deploying them as a complete loom is the ideal way



Chord Shawline Analogue Cable

to go - which is exactly what I did.

Taken individually the cables cost £200 for a 1 metre analogue RCA or digital interconnect while the speaker leads come in at £30 per metre with factory-fitted gold-plated banana or spade terminations provided for £100. For the analogue interconnect DIN, RCA and XLR terminations are all available.

One point to remember is that Chord always stresses that its cables are directional – with small arrows indicating the correct line of instillation – so bear this in mind when you put them into your system.

SOUND QUALITY

As a range the new Shawlines are not overly expensive. But taken as a package they do represent an investment that has to be seen as value for money to justify the

expenditure.

Happily, they do just this. First of all, plugging the loudspeaker cables into a combination of Naim amplification and a pair of Spondor A3 loudspeakers brought a tempo and clarity to the sound which similar cables at this price struggle to match.

Kylie Minogue's vocals on her duet with Nick Cave during 'Where The Wild Roses Grow' positively shimmered – especially as the 'speaker cable brought out elements of the sound that others can sometimes block such as subtle intonations in phrasing and the slight catch in the throat between lines.

Adding the analogue and digital interconnects, though, served to

reinforce the sense of extra clarity. Designer Nigel Finn is a musician as well as a cable expert and this comes through with both the leads.

Using the analogue interconnects between an Oppo BDP-105D with the Naim and Spondors shone a brighter light on the Nick Cave track than before. What's impressive is how the sound opens up, becoming more expansive with greater atmosphere.

Switching to Aaron Copland's 'Fanfare For The Common Man' the interconnects allowed the force of the bass drum to power into the room. There was a sense that the leads are not restricting the natural flow of the music but simply relaying the signal, which is what all good interconnects should do.

On the late David Bowie's 'Panic In Detroit' Mick Ronson's guitar has all the edgy vibrancy you could wish for but the whole mix is decidedly open, so Linda Lewis's backing vocals never descend too low or have a hint of sibilance.

The same presentation was evident in the digital interconnect. One of the advantages of the Tuned ARAY configuration when it first emerged was its ability to introduce a more organic nature into digital replay chains.



Chord Shawline Digital Cable

I used this new Shawline cable between a variety of different components and once again it had a lovely, musical flow to its sound. Acoustic instruments have a realistic timbre while there's a dynamism to fast-paced tracks.

If there's one caveat to bear in mind it's that the Shawlines don't quite have the outright dynamic range of Chord's more expensive cables such as the Sarum range, which work supremely well in high-end systems. But then again they do

not cost anywhere near as much – which is the whole point of the new Shawline range.

CONCLUSION

These new Chord Shawline cables are impressive performers. They major on detail and timing allowing you to hear just what individual components are doing without adding anything of their own character. If you have a good system and want to give it a boost these may just be the most cost-effective way to do that.



Chord Shawline Speaker Cable

CHORD SHAWLINE SPEAKER CABLE, ANALOGUE AND DIGITAL INTERCONNECTS

ANALOGUE RCA 1M £200 ADDITIONAL METRES £80

DIGITAL RCA 1M £200 ADDITIONAL METRES £80

SPEAKER £30/M UNTERMINATED FACTORY BANANA/SPADE TERMINATIONS 8 PLUGS ONE PAIR £100



OUTSTANDING - amongst the best

VALUE - keenly priced

VERDICT

An interconnect and loudspeaker cable loom that relays music without adding any colouration and at an affordable price. Highly recommended.

FOR

- timing
- openness
- lack of colouration

AGAINST

- nothing at the price

The Chord Company
+44 (0)1980 625700
www.chord.co.uk

It's A Shaw Thing

Jon Myles tries out Chord Company's new Shawline X loudspeaker cable – and likes what he hears.



The Chord Company's Shawline X loudspeaker cables may be a new name but they have a rich heritage. For the Shawline X is based around the Chord Rumour cable – a best-seller for 20-plus years - but with some significant changes.

The conductors are still silver-plated, insulated with XLPE and arranged in a twisted pair configuration. But with the Shawline X Chord have taken the existing conductor layout and added a specially-chosen PVC internal jacket to reduce mechanical noise, before applying the same high density, dual-layer foil and braid shield that is used on the more expensive Chord Epic.

And while previously PTFE - Teflon - was the standard material for insulation, a new material known as XLPE (Cross-linked Polyethylene) has been used. This is said to bring a cleaner, crisper sound by reducing interference, allowing smoother signal flow.

SOUND QUALITY

Swapping out a pair of basic loudspeaker cables and inserting the Shawline X between a Creek Evolution 100A integrated amplifier and a pair of Spondor AI loudspeakers showed a clear improvement. The Chord cable is clearly engineered to be of a balanced nature. John Martyn's 'Solid Air' had added depth and dynamics.

The timbre of his guitar was more realistic, the fine details of his playing coming over with uncanny accuracy. It was as though I could hear deeper into the mix.

Also evident was the increase in micro-dynamics. On 'Debaser' by the Pixies the guitars often sound slurred – but not with the Shawline X. I could clearly hear two separate instruments and they timed together exactly as they should. Black Francis's vocals were clear and intelligible - even when he went into his barking-like phases. Bass was taut and firm without being overpowering – or dominating the track after its initial introductory passage.

Upper registers were also well served. Albert Ayler's saxophone on 'Spiritual Unity' - that can sound piercing through some loudspeaker cables - came across as melodious and fluent. Some of the higher notes were a little restrained but that added to the balanced sound on offer.

Those who like their cables to tune a system - by adding more bass or treble - may not find the Shawline X to their tastes. But the majority who require a cable that lets music flow relatively unimpeded will like what they hear.

As an experiment I plugged the

original — admittedly a little cheaper — cables back in and put on Arvo Part's 'Cantus in Memoriam Benjamin Britten'. It sounded good. But with the Shawline X cables in place there was more atmosphere and detail and a greater sense of presence. The reverberations of the final bell lasted longer, giving a more striking effect.

CONCLUSION

The Shawline X cables are extremely balanced and enjoyable. The biggest compliment I can pay them is that they simply get out of the way and let the music come through, revealing details you may have never noticed before on many recordings. Definitely a worthwhile upgrade for many a system.

CHORD SHAWLINE X £30 PER METRE



OUTSTANDING - amongst the best

VALUE - keenly priced

VERDICT

A balanced, detailed cable that lets music sound as it should. Gives instruments a natural timbre.

FOR

- evenly balanced
- detailed
- adds depth to recordings

AGAINST

- nothing at the price

The Chord Company
+44 (0)1980 625700
www.chord.co.uk



Signed With A Twist

Looking for a high-end speaker cable upgrade? Paul Rigby tries the Chord Signature Reference.

Hi-fi attention can be focused in and around boxes – amplifiers, CD players, turntables and the like, even enlightened hi-fi users relegating the 'speakers to add-on necessities with little consideration of the cabling. Yet the speaker cables are an essential ingredient for good sound. Get this bit right, you'll certainly notice – and your music will thank you for it.

Chord's Signature speaker cables have actually been around for some time. In fact, they've been selling nicely for around ten years. When Chord took a second look at them they realised that an upgrade was both possible and worthwhile so the Signatures were hauled back into the workshop for a wash and a brush up.

Well, actually, it's a bit more than that since Chord have added more effective shielding, silver-plated conductors and PTFE insulation. That shielding features high density foil and 95% coverage by a metallic braid. You'll notice from the accompanying images that the cables are also

twisted to improve sound quality. The thrust of these upgrades was (hopefully) to produce a neutral tone. So I'll be looking out for that during the sound tests. Standard colours are red and black or all black, but if there's a particular colour you really want, please ask and I'm sure the company will be able to sort you out.

SOUND QUALITY

I began with a slice of David Bowie and his 'Low' album. Playing the track 'Breaking Glass' I was happy to hear that the bass had an articulate aspect that helped to separate it from the drums. Both occupying the stereo the soundstage, there was plenty of opportunity for confusion between them, with smearing in the mids and bloom in the bass. That never happened with the Signature Reference cables though. Not only were both kept well apart but the bass guitar was also temporally focused enough to provide a rhythm that was easily followed by my ear. At no time did the bass guitar seemingly go AWOL to escape my attention,

and at no time did the processed, gated drum sound lose control.

Further, I was impressed by the dynamic performance of the Signature Reference cables during Don Cornell and 'Heart of my Heart' from the original 'Great Hits' Dot release. The bass was appreciably low and rumbling while the upper mids and treble were fragile and delicately detailed. Cymbals and piano offered enough precision to deliver to my ear their intricate work. Via average cables, this complex business blurs into a single noise. The Chords managed to dig into the recording to separate out this necessary information.

CONCLUSION

High-end cable design asks a lot of the designers partly because the price places expectations upon them. Chord has nothing to fear here because this set of cables provides a splendid array of sonic highlights that provides fine transparency and – yes – neutrality of tone to bring a sense of natural music detail. A fine set of loudspeaker cables then.

**CHORD
SIGNATURE
REFERENCE
SPEAKER CABLES
3M £1,350
(OTHER LENGTHS
AVAILABLE)**



**OUTSTANDING - amongst
the best.**

VERDICT

Providing clarity and a neutral tone, the Chord Signature Reference speaker cables allow music to sing.

FOR

- dynamic reach
- instrumental separation
- clarity

AGAINST

- nothing

The Chord Company
+44 (0)1980 625700
www.chord.co.uk

Minitest

The Chord Company Clearway Digital

PRICE: £100 for 1m TELEPHONE: 01980 625700 WEBSITE: chord.co.uk

► DETAILS

PRODUCT

The Chord Company
Clearway Digital

ORIGIN

UK

FEATURES

Oxygen-free solid copper central conductor with polyethylene insulation; silver-plated VEE 3 phono plugs

DISTRIBUTOR

The Chord Company

THE CLEARWAY DIGITAL cable has been designed around The Chord Company's flagship Sarum Super ARAY Digital interconnect, although the Clearway costs considerably less. It uses the company's ARAY conductor design to reduce both interference and internal reflections to maintain a constant characteristic impedance. The solid oxygen-free copper conductor is insulated with a gas-foamed polyethylene insulation and screened by a high-density braided copper shield. The outer blue jacket seals and protects the signal conductor from interference.

Terminator too

Standard terminations are Chord's direct silver-plated VEE 3 RCA plugs, but silver-plated BNCs or a 3.5mm mono jack at one end can also be supplied. Custom cable lengths are also available with all terminations. Directionality is indicated by an arrow printed on the black heatsink label.



Even though it has a solid central conductor, the Clearway is nevertheless a very flexible cable. The thing that first strikes me when using it is the believability of the musical performances. With an orchestral piece such as the Rosetti symphony, the orchestra has a real presence in the room. Tonal balance is perfect and instruments are well defined. The David Gilmore track really packs a punch and the lively performance is well conveyed. The bass is well extended and beautifully controlled, the vocals are clear and easy to

understand, and the Clearway certainly takes jazz music in its stride. A recording of Eva Taylor singing *Everybody Loves My Baby* is bright without being at all strident and the atmosphere is all there, from the relaxed singing style of Eva and the jovial banjo playing, to the clear trumpet notes ●

VERDICT

Provides a very believable sound that seems to suit a wide range of musical styles



The Chord Company

Clearway analogue RCA interconnect



HAND BUILT IN Wiltshire, The Chord Company's Clearway interconnect uses the maker's proprietary ARAY technology like the C-Line RCA interconnect (HFC 403). This was originally developed for its flagship Sarum range and was designed to offer improvements in detail and transparency. Building on the C-Line ARAY design, the Clearway improves the conductors by using a very high-purity oxygen-free copper. The insulation has also been upgraded to Fluorinated Ethylene Propylene (FEP) and the cable is screened with a higher density foil to improve shielding. It's terminated with VEE 3 direct silver-plated RCA plugs, but can also come with DIN or XLRs and can be custom made to any length.

One direction

I connect the interconnect between my preamp and monoblocks with the arrows pointing towards the monoblocks, and run them in by playing music with the monoblocks switched off for 10 hours before undertaking any subjective listening tests. I start off with Saint-Saëns *Organ Symphony No.3* played by The City of Birmingham Symphony Orchestra conducted by Louis Frémaux. This recording is noted for some really deep organ notes during the first movement. The power and emotion is incredible, and the Clearway has no problem conveying this to my monoblock amplification without restraint. The more joyful second movement is sprightly and tuneful, and all sections of the orchestra are clear and well positioned within the soundstage.

Turning to some baroque music to check out Clearway's handling of solo instruments, a delicate recording of Rameau harpsichord pieces played by George Malcolm demonstrates its sophisticated handling of the instrument. I am really drawn into the performance by the intimate playing of all the complexities of the piece and the



tonal variations of the pedal stops. The leading edges and natural decays of each note of the harpsichord contributes well to the overall realism of the reproduction.

It's time to lighten the mood with some classic Latin music played on the guitar by Tony Mottola. His version of Cole Porter's *I Love You* is light, airy and tuneful, with a perfect balance between the guitar, flute and drums. As with the solo harpsichord music, the tonal details of each instrument are extremely well conveyed and musical.

To see how the Clearway performs with vocals, I select David Bowie's *The Stars (Are Out Tonight)*. Vocals are clear and not submerged into the drums or guitar accompaniment, which is quite an achievement with this piece of rock music as they are very prominent throughout the track. In addition, the vocal is reproduced extremely accurately.

To focus on the Clearway's bass response, I opt for *Black Lightning* from Gordon Giltrap's *Airwaves*. The guitar playing demonstrates a great

musicality and the bass line is well extended, yet punchy and tight – just as I like it.

I finish off proceedings with a superb direct-to-disc vinyl audiophile recording of the Syd Lawrence Orchestra playing Benny Goodman's *Sing, Sing, Sing*. This is an exuberant recording and the trumpet and trombone solos are sharp and natural without becoming unpleasantly harsh. The drums that resound throughout the piece are punchy and the Clearway takes the whole thing comfortably in its stride.

Ear for detail

To sum up, this interconnect very much fulfils the objective of creating a set of analogue cables that can carry a signal with a sense of musical coherence and a high level of detail and dynamics. All of this leads to a great insight and involvement into any music you listen to. If you are considering an upgrade from a set of budget interconnects, the Clearway gives you every reason to re-explore your music collection. **NR**

DETAILS

PRICE
£100 for a 1m pair
TELEPHONE
01980 625700
WEBSITE
chord.co.uk

OUR VERDICT



The Chord Company

C-USB interconnect cable



THIS YEAR, THE Chord Company has added a number of digital interconnects to its entry-level C-range, including this Type A-to-Type B USB cable, which has been specifically designed for audio applications.

If a poor-quality cable is used to connect a computer to a DAC, it can cause all sorts of effects that will interfere with the quality of the audio signal being transmitted. These can result in errors being generated in the digital signal, which the DAC has to correct. Although less important for computer applications, such as hooking up a printer to a PC, these errors can introduce jitter and other issues that degrade the audio signal. A good-quality audio USB cable should have excellent screening to keep out RFI along with high-quality plugs to ensure a decent connection.

The C-USB builds on the company's Silver Plus USB cable by improving

the conductors and increasing the shield density. It features silver-plated oxygen-free copper conductors, which are insulated with a low-loss, gas-foamed polyethylene insulation.

Let's twist again

The internal configuration uses twisted-pair data conductors with dual-layer, high-frequency shielding. The cable is terminated with moulded plugs with gold-plated connectors.

I use the C-USB to connect a Windows PC to my Alpha Design Labs GT40a (*HFC 399*), which is acting as a DAC for playing music files on my computer through my hi-fi. When I play a hi-res 24/192 PCM file of The Locrian Ensemble of London playing the *Rondo* from Mozart's *Eine Kleine*

Nachtmusik, I notice audible improvements in terms of the accuracy of the instrument placement within the soundstage. As with other cables in Chord's impressive C-range, the C-USB looks and feels incredibly well made, and will ensure that your music file signals are handled with integrity for years to come. **NR**

DETAILS

PRICE
£50 for 0.75m cable
TELEPHONE
01980 625700
WEBSITE
chord.co.uk

OUR VERDICT



The Chord Company

Shawline ShawCan headphone cable



WHILE IT IS common to consider upgrading speaker cables, the wire that's fitted to headphones is all too often overlooked. To redress the balance, Chord has added the ShawCan to its popular Shawline range, making this its first headphone cable in its 32-year history.

The ShawCan is made from high-quality, silver-plated conductors insulated with a PTFE dielectric. These are screened with a carbon composite that, in addition to blocking out RFI, has been designed to minimise unwanted mechanical noise – an inherent problem with headphone cables. The conductors are enclosed in a black outer jacket that also assists acoustic damping. The cable uses an adapted version of Chord's Super ARAY conductor geometry, which was originally developed for the Sarum range.

Prices start at £275 fitted with a 3.5mm jack plug or £350 with a 6.35mm jack plug. At the headphone end, a range of terminations can be fitted including mono or stereo 3.5mm jack plugs (pictured) or two-pin IEM plugs. The cable is supplied as standard at 1.5m, but custom lengths are available to order at £80 for each additional metre.

The ShawCan is lightweight and flexible. The cable reviewed here is fitted with two-pin IEM plugs for connection to my Sennheiser HD 600 (HFC 300). It is almost as flexible as the standard supplied cable and doesn't exert any pressure on the earcups when I move my head.

Spot the difference

I listen to a variety of music and am in no doubt that the new cable offers noticeable audible improvements over the original one. Vivaldi's *Opus 7* performed by I Musici has a more open and detailed solo oboe and the other instruments are more clearly defined within the soundstage. There is also a marked improvement in imaging with a clearer instrument focus of both the soloist and the entire orchestra.

DETAILS

PRICE
£275 for 1.5m cable

TELEPHONE

WEBSITE
chord.co.uk

OUR VERDICT



I experience similar improvements with a full orchestra. With a superb recording of Rimsky Korsakov's *Capriccio Espagnol* played by the National Symphony Orchestra under the baton of Debbie Wiseman, the exciting opening movement seems more expansive with the ShawCan cable fitted. The improvement in clarity results in a slightly fuller, yet uncluttered, sound. I have a greater sense of being there in front of the orchestra. It is as though the element of realism has been clicked up a notch and the overall effect is one of greater involvement with both the music and the performance.

To explore the effect of the cable with vocals, I turn to a CD of Ane Brun singing *These Days*. With the ShawCan fitted, there is a greater sense of depth to the deep bass notes that accompany her singing and the organ is better positioned behind her than with the standard cable fitted. As the music progresses, I am increasingly aware of a real sense of spaciousness, even though I am listening on a pair of headphones. Her diction is beautifully clear and expressive throughout.

The classic Pink Floyd recording of *Money* from *The Dark Side Of The Moon* is reproduced well and the cash registers in the opening section show

off the top-end response of the cable particularly well. When the electric bass guitar takes over, there seems to be an improvement in the clarity of all of the individual notes played. There is also a very slightly increased edginess to the vocals (in a good way), which is one of the hallmarks of the Pink Floyd sound.

Some like it hot

Another CD of the Jan Harbeck Quartet playing Cole Porter's *Too Darn Hot* enables me to explore the cable with some jazz. Swapping between the standard cable and the ShawCan demonstrates a greater excitement to the performance with the Chord cable. The drums really keep the pace of the music going throughout. The timing of this swinging piece is superb with the opening drum roll as it follows through into the opening melody played on the saxophone. As the music progresses, the saxophone, piano and drum indulge in some impromptu playing, which is extremely spirited – there is certainly great energy and excitement with the performance.

The ShawCan sure can deliver sonic benefits and so consequently comes very highly recommended. **NR**

The Chord Company

C-digital interconnect cable

MANY PEOPLE ARE tempted to use an analogue interconnect to connect a coaxial output of one piece of equipment to a coax in of another. But standard analogue cables are not really suitable for use as digital interconnects as their bandwidth is not great enough. Digital coax cables need a 75ohm characteristic impedance, and not having this will result in unwanted reflections of the digital signal and jitter, which the digital processor has to manage. Furthermore, digital cables are designed to work at much higher frequencies than analogue cables – well in excess of 1MHz – in order to preserve the digital waveform. This cable is specifically designed for the job and at a price that won't break the bank.

The C-digital employs The Chord Company's ARAY conductor technology, which is based on the

Tuned ARAY geometry that it originally developed for its top-of-the-range cables. The conductors are made from oxygen-free-copper, which is insulated with a polyethylene dielectric. The cable is then screened with a high-density foil shield and terminated with over-moulded RCA plugs, which have gold-plated contact areas.

A kind of magic

I use a PrimaLuna ProLogue Eight Mk.2 CD player as a source and connect its coax digital output to the coaxial digital input of a Cambridge Audio Stream Magic 6 v2 (HFC 393) acting as an external DAC with the C-digital cable. Playing a CD of Vivaldi's *Double Concertos* by The Academy of St. Martin-in-the-Fields demonstrates just how well the digital



signal is communicated from the CD player to the DAC. The performances flow really smoothly and the trumpet blasts, although strident, are not at all edgy, nor do they give any impression that the sound is breaking up.

The C-digital is a really well-made cable that effortlessly conveys the digital signal from my CD player to the DAC, and it also represents great value for money. **NR**

▶ DETAILS

PRICE
£40 for 1m cable
TELEPHONE
01980 625700
WEBSITE
chord.co.uk

OUR VERDICT





Chord Company Shawline **£480**

From the pioneers of affordable hi-fi cables comes this sober looking but sweet sounding loom

DETAILS

ORIGIN
UK

TYPE
Interconnect/
speaker cable

FEATURES

- Interconnect: silver-plated copper conductors; FEP dielectric
- Speaker cable: silver-plated copper conductors; PTFE dielectric
- 1m interconnect £200/3m speaker cable £280

DISTRIBUTOR

The Chord Company Ltd.

TELEPHONE
01980 625700

WEBSITE
chord.co.uk

There's a reason for the unusual name – it commemorates former associate of The Chord Company, David Shaw. Indeed this looks and feels very much like it's a product of the Wiltshire company – right down to the so-called Tuned ARAY design (see boxout). It sports silver-plated copper conductors, encased in an FEP dielectric, with a composite shielding material that the manufacturer claims works over a wide bandwidth and also reduces mechanical noise. It's put inside a flexible plastic tube, then a protective outer braid is fitted – the result is a pretty inert mechanical cable to my ears. Silver-plated Chord VEE3 RCA phono plugs come as standard, although XLR and DIN terminations are also available to order.

The Shawline speaker cable is based on the old favourite Chord Rumour – whose 16-gauge silver-plated oxygen-free copper conductors it shares, insulated with PTFE and arranged in a twisted pair configuration. Chord has added a specially chosen PVC internal jacket to reduce mechanical noise, before applying the same high-density, dual-layer foil and metal-braided shield seen on the Chord Epic (HFC 388). It has an 8mm diameter.

Sound quality

Were you to put the muscular Atlas sound together with the more romantic and finessed Black Rhodium, you'd lose half the strengths of both, but half the weaknesses too. The result would sound something like this – a really good all-rounder that doesn't excel in one particular respect, but is nevertheless a strong force to be reckoned with. As the Daft Punk track shows, The Chord Company loom can thump out solid tracts of bass – it's up with the Atlas in this respect – but it also has a good degree of sophistication. You couldn't call it Neanderthal, whatever else you say. That makes this a great 'real-world' combination for those looking for a do-it-all design.

The Tony Banks track is a superb modern recording, and the Shawline combo really captures its essence. The fundamentals are correct; the soundstage is wide and drops back better than most here. Instrument location is pretty accurate, and there's

HI-FI HARMONY

When Sally Gibb (née Kennedy) launched The Chord Company in 1984, it was a small concern in an embryonic market. Since then the company has grown hugely, and moved premises several times. It now has a large factory just outside Salisbury, Wiltshire. A great deal of time is spent auditioning both its own and rival manufacturers' products in the listening room, which houses a lot of esoteric equipment. This has led to the development of what the company calls its Tuned ARAY conductor configuration, which it describes as a "revolutionary way of building audio interconnects." The first cables were developed using the company's then flagship Sarum range, a few years back. The Shawline analogue cables use the same specially developed conductor geometry to deliver a superior performance than would otherwise be possible, says Chord.

a good sense of the recorded acoustic inside which the orchestra is playing. The Chord Company loom conveys the rhythmic flow of the music skilfully, getting the foot tapping with the pleasing way it signposts dynamic contrasts, for example. It's when you really try to listen in, though, that this combo becomes unstuck; it doesn't have the crystalline clarity of the QED pairing – although some may find the latter just a bit too stark and cold. Again, it's all up to synergy and system matching.

The headline point about this dynamic duo, however, is that you can put any type of music through it and it's still enjoyable. Hi-fi considerations seem to slowly ebb away, as you get into the music. The Saxon track has me on the edge of my seat, offering just the right combination of power and pace ●



Hi-Fi Choice

OUR VERDICT

SOUND QUALITY ★★★★★	LIKE: Nicely built; strong, musical and smooth performance
VALUE FOR MONEY ★★★★★	DISLIKE: Unspectacular looks, but who cares?
BUILD QUALITY ★★★★★	WESAY: Excellent all-rounder with a natural, organic way of making music; it's smooth too
FEATURES ★★★★★	

OVERALL



Chord Company

Shawline Power Chord mains cable



MADE FROM 3 x 14 AWG high-purity multi-strand copper conductors with a parallel conductor layout, the Shawline has PVC internal and external insulation along with a high mechanical damping factor. Surrounding the conductors is a dual-layer high-frequency braid and foil combination shield. The cable is finished off with an elegant grey high-density vibration-damping outer jacket.

The supply end is terminated with a 13A UK mains plug fitted with a 13A fuse and a 13 or 16A IEC plug at the other end. The cable is available in standard lengths of 1m, 1.5m and 2m, while custom lengths and terminations, including Euro, Schuko, Australian and USA mains plugs, are available to order.

DETAILS

PRICE
£200 for 1m cable
TELEPHONE
01980 625700
WEBSITE
chord.co.uk

OUR VERDICT



I connect the Shawline to my phono stage preamp and there is no real evidence of mains-borne interference – something I am often aware of when using standard ‘kettle leads’.

Balancing act

Rachmaninov’s *Piano Concerto No.2* highlights the excellent front-to-back imaging with this recording. The balance between piano and orchestra is perfect, and the piano is never swamped by the orchestra. The

performance somehow has more excitement and energy, especially during the climatic ending.

A superb recording of JS Bach’s *Goldberg Variations* played by Trevor Pinnock has all of the sophisticated elegance I am used to hearing. The tonal complexities of the instrument really come to life in my listening room with the Shawline installed. This is an excellent power cable that delivers real sonic benefits. **NR**

Chord Company

Rumour X loudspeaker cable



ACCORDING TO THE Chord Company, one of the issues that can affect loudspeaker cable is phase distortion. Although PTFE is a very good dielectric, Tylon is said to offer sonic improvements as a phase-stable insulation material. The problem is that Tylon is costly to produce and so has only been used in its flagship products. As an alternative, cross-linked polyethylene called XLPE doesn't suffer from phase issues and can be produced at a much lower cost, making it ideal for the Rumour X.

An update to the Rumour cable that's been in the company's range for over 20 years, the unscreened X uses 16 AWG silver-plated OFC conductors sleeved with a 6mm diameter white PVC insulation. My

sample is factory-terminated with ChordOhmic silver-plated banana plugs for £120 plus £18 per metre.

X appeal

Connecting the Rumour X to my transmission line speakers and valve monoblocks and playing an LP of Handel's *Organ Concerto No. 1* in G Minor by the London Philharmonic Orchestra, I am extremely impressed by the well-extended and tight bass response, especially during the organ passages. The soundstage is vast and the whole performance is both powerful and sophisticated. The brass is beautifully strident and the strings are clear and crisp, without being at all harsh, even during the crescendos.



With David Bowie's *The Next Day*, the vocal performance is perfectly balanced between the drums and guitar accompaniments. Overall, the Rumour X loudspeaker cable conveys a sophisticated performance that will work brilliantly in a variety of music systems and is good value. **NR**

▶ DETAILS

PRICE
From £18 per metre

TELEPHONE
01980 625700

WEBSITE
chord.co.uk

OUR VERDICT



Chord Company

Epic XL loudspeaker cable



COMBINING ELEMENTS OF

Chord's Signature Reference/XL cable with its Epic speaker cable, Epic XL loudspeaker wire boasts internal conductors that are separately screened with a high-density braid and foil shield. They are insulated with a special soft PVC internal jacket to correctly space the shielding and minimise mechanical noise. The cable is finished in a translucent outer jacket to further reduce unwanted mechanical noise. The conductors are twisted at each end and clamped in place before being terminated with either banana or spade connectors.

Keeping it reel

Connecting the Epic XL cable between my valve monoblocks and transmission line speakers, I play a jazz recording on my Studer A810 reel-to-reel tape deck with a Yarlung Records 15IPS copy master tape of The Yuko Mabuchi

Trio. The piano playing during the track *Seriously* bristles with energy and excitement and has fantastic detail with the speaker cable in place. I can clearly hear the fingering of the double bass while the drums are perfectly positioned towards the right-hand side of the soundstage.

A live performance of Vivaldi concertos by Interpreti Veneziani is equally captivating. The soundstage

has enormous depth and I feel part of the audience with the performers playing on the stage in front of me. Instrument placement is precise, and I am able to individually locate all eight players as the cable positively allows the sense of realism in the presentation to flow.

This is certainly an epic offering that delivers an enhanced level of clarity and detail to performances. **NR**

▶ DETAILS

PRICE
£600 for a 1.5m terminated pair

TELEPHONE
01980 625700

WEBSITE
chord.co.uk

OUR VERDICT



Chord Company

ChordOhmic Transmission Fluid



IT'S EXTREMELY IMPORTANT to ensure that the metal-to-metal contacts in your system are kept as clean as possible. Otherwise it can lead to resistance, which can generate noise, resulting in subtle interference in the background during quiet passages or increased colouration of the sound. Meanwhile, with power supplies and mains connections micro-arcing can occur across a poor contact, which also generates noise and, in extreme cases, heat.

To combat this, Chord Company has developed its ChordOhmic Transmission Fluid, a two-part liquid polymer and polish solution that has been specifically designed to maximise the surface area of all connections, ranging from very low voltage up to mains potential. The solution works by deploying polymers to fill any pits and imperfections on the surfaces of

connections, thereby increasing the effective contact area. The water-based fluids can be applied to all metal contacts, including interconnects, speaker cables, power cables and so on. Application of the solution is recommended every two years, but Chord notes that some of its test cables that were treated more than four years ago are still outperforming untreated, identical cables built at the same time.

Stay in contact

I apply it throughout my system using first the polish, then the conductive polymer solution. I clean all of the RCA phono plugs and sockets, mains fuses and their holders, mains plugs, IEC connectors and even the pins on my turntable cartridge.

My system sounds noticeably clearer and the music a tad more real after treatment. The midband is slightly



more forward and the top end crisper and more refined. Playing a CBS LP of Simon and Garfunkel's *The Boxer* shows a far better control of sibilance with this bright recording, and the positioning of the vocals is better focussed within the soundstage. Only a small amount of fluid is required, so 10ml should last for many years. **NR**

DETAILS

PRICE
£200 for 10ml
TELEPHONE
01980 625700
WEBSITE
chord.co.uk

OUR VERDICT

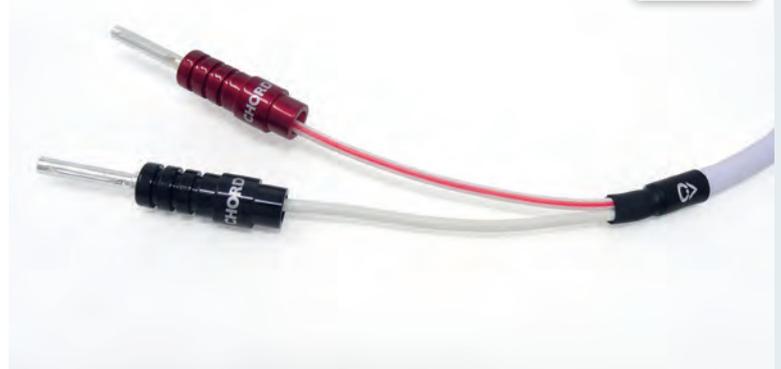




Chord Company

Odyssey X loudspeaker cable

MADE FROM THE same materials as the Rumour X (*HFC 447*) but with heavier gauge conductors, the Odyssey X speaker cable is designed to bring more control, dynamics, definition and detail to a system. The original Odyssey was launched back in 1998 and designed to be very neutral sounding. It used PTFE as its dielectric material, but the Odyssey X instead opts for XLPE (cross-linked polyethylene). As with Chord's Tylon dielectric, XLPE doesn't suffer from the same phase issues as PTFE and can be produced at a lower cost.



Kicking off with Prokofiev's *Piano Concerto No.2* performed by Vladimir Ashkenazy and the London Symphony Orchestra, I am instantly struck by the enormous soundstage. Both the side-to-side and the front-to-back imaging are superb, and all the instruments are well focused and clearly positioned. The piano is full and rich and displays splendid levels of detail and realism.

The Syd Lawrence Orchestra with Clare Teal singing *Too Darn Hot* really swings into action and livens up the listening room. From the opening saxophones that lead into the main vocal, the track's timing and pace sounds superb. Teal's singing has great energy and the soundstage is nicely broad and deep as the Odyssey X conveys believable and elegant performances. **NR**

The X factor

The Odyssey X is unscreened with a white PVC outer jacket and diameter of 8mm. The conductors are made from 12 AWG silver-plated oxygen-free copper and though the Odyssey is 2mm thicker than the Rumour X, it is still very flexible.

DETAILS

PRICE
£30/m plus £120
for factory-fitted
banana plugs

TELEPHONE
01980 625700

WEBSITE
chord.co.uk

OUR VERDICT



Chord Company

C-power mains cable



▶ DETAILS

PRICE
£50 for 1.5m cable

CONTACT
01980 625700

WEBSITE
chord.co.uk

OUR VERDICT



THE MAINS LEADS supplied with most audio equipment are not of the highest quality and they have the nickname of kettle leads as that's what most of them have been made for! They are made from low-cost, three-wire conductors and no attempt has been made at screening them as kettles are seldom affected by RFI!

The Chord C-power is an easy to fit upgrade to pretty much any audio component that has an IEC input socket. This screened power cable follows the same design principles as every other Chord cable, which means attention has been paid to shielding, conductors and termination. The C-power is fitted with a high-quality over-moulded mains plug and IEC plug. Chord says that over-moulded plugs should not be dismissed, as they have certain advantages. All the terminations are high-pressure crimped and so have no

screws that can work loose. The over-moulding process holds the conductors firmly in place and reduces mechanically induced noise.

Bussmann's holiday

The mains plug is fitted with a high-quality Bussmann 10A fuse and the cable is very flexible, despite the extra shielding that has been implemented within. When I fit it to a CD player in place of the supplied 'kettle lead', I find that there is an immediate improvement in clarity, which is consistent with the shielding reducing the amount of extraneous noise that is injected into the audio system.

Chord's C-power is a well-made, no-nonsense mains lead that is a worthwhile upgrade to the kettle-style power leads that are supplied as standard with many items of audio equipment. **NR**

Chord Company

C-stream Ethernet cable



AUDIOPHILES REALISE THE quality of the audio signal is influenced by many factors – not only within the analogue domain, but also the digital one. It is, therefore, important not to neglect the quality of digital interconnect cables, including those connecting your streamer to your local area network.

Following the update of its analogue cable range, Chord Company has now launched a new range of Ethernet cables, some of which incorporate its proprietary Tuned Array cable-tuning technology. All the cables are designed to bring noticeable sonic benefits and maximise the performance of DACs, transports and high-quality Ethernet-enabled audio components. The cable here is the C-stream entry-level Ethernet cable.

The C-stream has gold-plated signal contacts with an over-moulded plug surround with a non-compression

cable strain relief. Inside the cable are OFC conductors and low-density polyethylene insulation. The twin conductors are precisely twisted with each pair featuring an overwrapped foil shield. The four pairs are additionally overwrapped with a further foil shield. The C-stream is available in 0.75m, 1.5m, 3m, 5m and 10m lengths.

Stream lover

This cable is certainly well made and the connectors are noticeably superior in construction to the usual all-plastic RJ45 plugs that are often fitted to Ethernet cables and which squeeze the cable for strain relief. The C-stream, on the other hand, has a firm plastic clip and a gold-plated metal screen around the pins. As expected, the plugs are really easy to click into the RJ45 sockets on both

my Squeezebox Touch and my network hub.

When I play music streamed from my PC, I can clearly detect a subtle improvement in spatial positioning of instruments, compared with a standard computer Ethernet cable. I attribute this to the minimisation of cable-induced jitter, which can so easily be introduced through cables that have poor or non-existent screening. Nice one Chord! **NR**

DETAILS

PRICE
£40 for a 0.75m cable, up to £90 for a 10m cable

CONTACT
01980 625700

WEBSITE
chord.co.uk

OUR VERDICT





Chord Company

Epic Twin speaker cable

THIS LOUDSPEAKER CABLE is a high-performance shielded wire with many of the characteristics of the more expensive Chord Signature. These cables are fitted with a free-floating screening to significantly reduce external interference from reaching the signal conductors. If you consider that quiet passages of music will only be tiny signals, it can be appreciated that this can be an important consideration.

The conductors are two 12 AWG, 19-strand silver-plated oxygen-free copper in a twisted pair configuration. They are insulated in PTFE that Chord considers to be essential to achieving the most neutral tonal characteristic from silver-plated conductors. Each conductor's insulation is coloured to indicate polarity – white with a red stripe is positive and white is

negative. These twisted conductors are then surrounded by PVC to support the dual-layer, high-density braid and overlapped foil shielding. This is then finished off in an external jacket of translucent brown PVC and printed to indicate the directionality. The diameter of the cable is 11mm.

Go bananas

Apart from being supplied unterminated, the cable can be fitted with Chord 24 karat gold-plated banana plugs, direct gold-plated copper spade connectors or BFA Camcon connectors. When supplied with connectors, the colour-coded heatshrink is also printed to show the signal direction.

As with any cable, it requires a minimum of 100 hours to run in before it will perform at its best and my review samples (which are fitted with banana plugs) are run in for this



time. As a result, I am rewarded with a sound from my system that feels open and effortless. In particular, vocals seem to have more detail and all the nuances of expression (including the odd intake of breath) are very evident. Bass is really well controlled and tight, while timing is excellent. To sum up these cables in one word, they are 'musical'. In short, they are quite simply a superb sounding set of speaker cables. **NR**

▶ DETAILS

CONTACT
01980 625700

WEBSITE
chord.co.uk

OUR VERDICT



Chord Company

Sarsen speaker cable

APART FROM SOUNDING great, the cables that connect your power amp to your speakers often have to be routed inconspicuously around the edges of a carpet. Therefore, something that can handle the power from the amplifier has to be balanced with a cable that is both flexible and thin.

Loudspeaker cables don't get much more discreet than the Sarsen, which combines a clever mixture of materials to produce a high-performance speaker cable with a diameter of less than 4mm. Chord says not to let the diminutive size of the cables fool you. The company believes that when the correct choice of materials is used for the construction of the cables, then the result can be a tight bass that is well defined and properly tuneful, thus giving the music a real sense of drive and rhythm.

The Sarsen uses FEP (Fluorinated Ethylene Propylene) conductor insulation, housed in a 3.8mm white PVC jacket. Chord notes that the right choice of insulation makes a big difference to performance. The conductors comprise two 18 AWG multi-stranded oxygen-free copper in a twisted-pair configuration.

Bananas and spades

The cable can be terminated in 24 karat gold-plated banana plugs, direct gold-plated copper spade connectors or BFA Camcon connectors. Banana plugs are fitted to the sample on review here. As with all good-quality cables, directionality is important and the correct connection from the amplifier to the speakers is marked with small arrows on the heatshrink that is fitted to the ends of the cables and banana plugs.



In use, I find that the Sarsen delivers a very clean and open sound to my loudspeakers. Bass response does not feel constrained either. In no way do I get the feeling that the output from my amplifier is being squeezed through restrictive conductors.

So if you really have a problem with the size of a speaker cable, but don't want to compromise on performance, the Sarsen is well worth considering – and represents great value for money too. **NR**

▶ DETAILS

PRICE
£8 per metre, plus
£96 for 8 banana
plug terminations

TELEPHONE
01980 625700

WEBSITE
chord.co.uk

OUR VERDICT



The Chord Company

Shawline analogue interconnects

NAMED TO HONOUR a late associate of The Chord Company – David Shaw – these interconnects make use of the Tuned ARAY cable conductor geometry that was originally developed for the company's premium Sarum range. The Shawline is £200 in the standard 1m length and fitted with silver-plated Chord VEE 3 RCA terminations, but it can be made to other lengths at £80 per additional metre. It is also available with The Chord Co.'s new lightweight DIN connections for an extra £25 or with Neutrik XLR plugs for an extra £50.

The conductors are silver-plated and the construction of the Tuned ARAY means that they are hand assembled. The cables are directional and this is clearly indicated by an arrow that's been printed on the heatshrink at one end of each interconnect.

I connect the Shawlines between my preamp and monoblocks. I decide to start off listening with some rock music and turn to the unmistakable voice of the late David Bowie singing *Love Is Lost*. Vocals are splendidly clear and expressive and the Shawlines never allow the voice to become submerged in the drums or guitar accompaniment.

Chariots of fire

Next up is a fantastic Decca recording on vinyl of Khachaturian's *Spartacus* with the famed composer conducting the Vienna Philharmonic Orchestra. The performance is superbly full and powerful. I am given a real sense of chariots charging around with the authoritative drums beating away



and commanding the orchestra in the frenzied activity. The trumpets sound robust and imperious and the percussion section is crystal clear.

The Shawlines are really top-class interconnects whose performance makes them stand out from the crowd. Give them an audition and hear for yourself. **NR**

DETAILS

PRICE
£200 for a 1m pair
TELEPHONE
01980 625700
WEBSITE
chord.co.uk

OUR VERDICT





Products on test: Primare R15, Chord Company LeylineX, Vertere DG-1 & Phono-1 Mk II

Booster Mighty power supply upgrade



Hi-Fi Choice

PASSION FOR SOUND

Issue No. 463

June 2020

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GROUP TEST

Reelin' in the ears
Six wireless in-ear headphones face off

hi-finews GROUP TEST

Hi-Fi News is no stranger to cable reviews and was the first to offer an authoritative account of 'USB cable sound' in 2013. Now, another ten brands are featured and all auditioned blind...

USB CABLES £10-£999

TESTED THIS MONTH

AUDIOQUEST FOREST	£35	LIGHT HARMONIC LIGHTSPEED	£999
CHORD SIG. TUNED ARAY	£400	NORDOST BLUE HEAVEN	£265
DIGITAL MUSIC BOX LINUS	£495	SIGNAL PROJECTS LYNX REFERENCE	£590
FURUTECH GT2 PRO	£210	STEREOLAB BLACK CAT SILVERSTAR!	£139
IN-AKUSTIK PREMIUM USB	£10	WIREWORLD SILVER STARLIGHT	£580



Cutting-edge gear, cherry-picked by the *Hi-Fi News* editor



The pinnacle of sound quality within its peer group



Great sound, great value and a cut above its rivals

• CD PLAYERS • TURNTABLES • CARTRIDGES • USB CABLES • AMPLIFIERS • DACS • TUNERS • SPEAKERS •

This time last year, *HFN* ran a ground-breaking group test revealing audible and measurable differences between USB cables. While every seasoned audiophile knows that different interconnect and loudspeaker cables will impact on the sound of a hi-fi system, this was the first time that USB – a synchronised, packet-based digital interconnect standard – was also shown to be cable-sensitive.

By way of anniversary, this month's group test pitches another ten USB cables into the mix, our measurements once again illustrating clear differences in the 'shape' of the data waveform arriving at the USB DAC [for more see my Opinion page in *HFN* Jul '13].

USB SPECIALISTS

Ten cable brands are represented here, but the presence of very new and specialist contenders reflects a certain maturity in this market. The lengths supplied varied from 1m to 2m according to the availability of stock, so please take note of this when comparing the prices. Some manufacturers offer lengths as short

as 0.5m while the USB standard specifies 5m as the maximum.

KEEP IT SIMPLE

For our subjective comparison we chose a system that would keep the signal path as short and as 'digital' as possible. A battery-powered Sony Vaio laptop running foobar2000 served as our front-end, its USB output driving the USB input of a Devialet 800 monoblock amp combination and pair of B&W 802D loudspeakers. Devialet's SAM bass optimisation regime was engaged throughout [see *HFN* Jun '14]. (You can see the room/set-up by visiting www.hifinews.co.uk/news/article/meet-the-team;-paul-miller/9952.)

As the only change to the system was its USB cable, our listening tests were necessarily performed at a fixed level. Any perceived change in 'loudness' was therefore a direct reflection of the 'sound' of the USB cable itself. Our listeners included *HFN* regular John Bamford, and all were unaware of the names or types of cables in the test or, indeed, of which cable was being auditioned at any one time. The results of each listening session were cross-

referenced to verify the consistency of our opinion.

QUALITY QUARTET

For auditioning we focused on four pieces of music. Two tracks were rips from CDs: the title track from *Just A Little Lovin'*, Shelby Lynne's 2008 collection of songs made famous by Dusty Springfield [UMG/Lost Highway 0602517448254] and 'No Sanctuary Here' taken from Chris Jones' *Roadhouses & Automobiles* released by Germany's Stockfisch Records in 2003 [SFR 357.6027.2]. We also played a 176.4kHz/24-bit file taken from one of Reference Recordings' 'HRx' DVD-ROMs: the opening *Non Allegro* from Rachmaninoff's *Symphonic Dances* performed by the Minnesota Orchestra under Eiji Oue [RR HR-96]. And because we found it so telling the last time we auditioned USB cables, we again played the 2009 44.1kHz/24-bit stereo remaster of 'Come Together' from The Beatles' *Abbey Road* album. But how obvious would the differences in USB interconnects really be? Read on...

REVIEWS & LAB TESTS BY PAUL MILLER

• CD PLAYERS • TURNTABLES • CARTRIDGES • USB CABLES • AMPLIFIERS • DACS • TUNERS • SPEAKERS •

Chord Company Signature Tuned Array



Taking its cues from Chord's 'tuned' Array Sarum USB cable, this Signature version also employs four separate but identical conductors for the differential data pair, +5V and ground. The coaxial conductors are heavily silver-plated, insulated with a superior PTFE dielectric and separately shielded with a high-density double braid.

All four conductors are gently twisted together and held in a woven black jacket and while this geometry may deviate slightly from the USB standard, the accurate waveshape and fast 11.9nsec risetime [see Graph] suggest its characteristic impedance is

not unduly influenced, at least at these data rates/frequency.

MATURE MUSIC

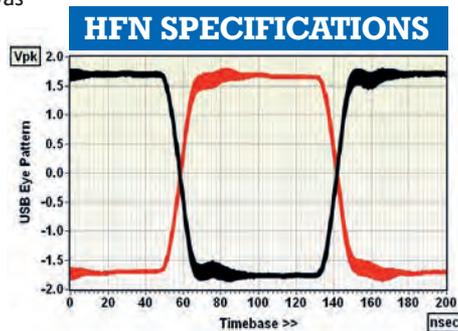
From the outset, it was patently clear we were auditioning a very 'mature' sounding cable, possessed of great control – delivering energy and passion when required as slickly as it revealed subtle details.

The limited bandwidth of The Beatles' remaster did nothing to dissuade us from the fun conveyed by this tightly integrated quartet, the vocals neatly counterpointing Ringo's rattling percussion.

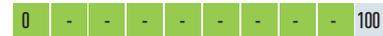
The percussive intro to Shelby Lynne's 'Just A Little Lovin'' also sparked a

cavernous acoustic, her voice slightly more forward with a 'headphone' intimacy that spoke to each and every listener. Her enunciation was very precise – tidy but convincing and free of the fuzzy quality that had infused the In-akustik and Furutech. Indeed, it was the only time in this test where her voice was genuinely 'breathy'.

Chris Jones enjoyed a similar vocal presence, the rich sound 'talking' so very expressively to our audience and earning the highest rating in this year's USB cable test.



Sound Quality: 85%



GROUP TEST VERDICT

• CD PLAYERS • TURNTABLES • CARTRIDGES • **USB CABLES** • AMPLIFIERS • DACS • TUNERS • SPEAKERS •

With the experience of last year's USB cable group test already under our collective hat, we began 2014's digital voyage with a degree of expectation. And we were not disappointed, for the differences between this crop of proprietary USB cables were no less audible. The Linus USB from Digital Musical Box and the Signal Projects Lynx Reference were arguably the most 'different' sounding cables here, and certainly the least conformant on test, but our panellists' concluded they were both 'distinctive but ultimately relentless', the Lynx marginally less oppressive.

TRADE-OFFS

Furutech's GT2 Pro also proved up-beat but with an illuminating quality that highlighted percussive details and studio reverb. It can sound a little unrefined, perhaps, but that's the trade-off. By contrast, Inakustik's budget-priced Premium USB is a bit of a smoothie. What you gain in civility and composure you lose in the liveliness of both extreme bass and treble. The music is not quite as colourful as possible, but 'Premium' could be perfect for taming the over-exuberant budget system.

There's nothing 'budget' about Wireworld's Silver Starlight and it does offer an appropriately big if

slightly blowsy sound, lacking the focus and instrumental precision we enjoyed with other cables here. It did fare rather better with our classical selection, it must be said.

SHINE A LIGHT!

Extravagantly-priced, Light Harmonic's LightSpeed cable sounded very, very tidy, rendering the likes of Chris Jones with a dry clarity. Similarly, The Beatles remaster was delineated like no other in this test, Lennon and McCartney's voices revealed in seemingly explicit detail while Ringo's drum-work was pristine. This is very nearly a 'great cable' but where is the emotion?

Stereolab's Black Cat Silverstar! certainly 'emoted' more convincingly and revealed what was described as the 'big musical picture' really well indeed, even if it didn't let us right into the fine detail of the performance. Recommended, nonetheless, as is the more affordable Forest from Audioquest.

THE CREAM RISES

The latter has a vibrant energy that held our attention and kept our feet tapping. It's a lively-sounding cable but one that can withdraw slightly in the face of the busiest material, sounding slightly sat-on and compressed. It's a lot of cable for the money though.

We also appreciated the quiet poise offered by Nordost's Blue Heaven. Guitars had body and substance while percussion typically brought a refreshing sparkle and air to the

richest-sounding tracks. Lacking only that last drop of very deep bass, Nordost's Blue Heaven is otherwise a superior USB cable, delivering a very neutral, measured and inherently musical performance.

UNEXPECTED WINNER

Chord's flagship Signature Tuned Aray cable sounds richly detailed and very expressive and while on first exposure it may seem to lack some 'bite', in practice there's no lack of colour or contrast to its richly hued performance. The timpani from Rachmaninoff's *Symphonic Dances* enjoyed a thunderous energy and strings thrilled just as the percussion sparkled in the depths of the soundstage. Vocals had a wonderfully breathy quality too, but was this necessarily the best 'in the round' USB cable we'd heard?

Returning to Chord's own USB SilverPlus (last year's winner) suggested not, for this latter cable – still a current item at just

£55/1.5m – was arguably better integrated still, detailed, insightful and inherently musical. The USB standard has not changed and, quite frankly, neither has our choice of favourite USB cable. ☺

'Chord's Tuned Aray offers a richly hued performance'



ABOVE: Nordost's Blue Heaven 2.0 – its music 'has a natural flow, free of grain'



ABOVE: Chord's top-of-the-line Signature Tuned Aray – voted the best USB in 2014!

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Chord Signature XL

One of Chord Cable's longest-running products, the Signature, receives just its second upgrade in materials and performance in fifteen years. Review & Lab: **Paul Miller**

There's a lot to be said for the philosophical approach to hi-fi manufacturing: 'if it isn't broken, don't fix it'. Chord Cables is certainly of this persuasion – its ranges are broadly distinguished by geometry, while performance is very gradually 'tickled up' by the transition to steadily superior conductors and dielectrics. For example, the original Signature speaker cable held court for a decade before the Reference version was released [HFN Aug '14].

The Reference benefited from an upgrade to silver-plated OF-copper conductors with a PTFE dielectric. Five years on and the latest 'XL' version of this Signature cable sees the PTFE exchanged for a soft, cross-linked polyethylene (XLPE or, more commonly, PEX) dielectric.

Almost inevitably, costs have crept up over the years, so the latest Signature XL is slightly more expensive than its forebear at £900 for a pre-terminated 1.5m stereo set. Priced at £300 per linear metre, the ticket for our 5m stereo set of Signature XL cable would be £3000.

The physical geometry of Chord's Signature cable is unchanged. Each signal/return conductor is a coaxial type although the silver-plated braid and foil screen remains unconnected. The outer jacket comprises a translucent PVC with a protective nylon mesh that comes in red/black or, as illustrated here, black/black colourways.

The cable's loose twisted-pair geometry pushes the series inductance up very slightly to 0.94µH/m, but the substantial 5.26mm² (10AWG) cross-section of those multi-stranded, silver-plated copper cores keeps the loop resistance down to a fabulously low 5.5mohm/m. Soldered to your choice of



ABOVE: Each of the Signature XL's conductors is a coax cable, but only the central core is connected to the plugs at each end. PTFE is replaced by XLPE in this version

'ChordOhmic' spade or 4mm connectors the power loss is just 0.0059dB/m.

STILL PUNCHING

Substantial-gauge cables typically make the most of amplifiers offering a low output impedance, so I auditioned the XL with Devialet Expert 800 monoblocks, as well as a Constellation Taurus Stereo [HFN Dec '17] and B&W 800 D3s [HFN Oct '16], it proving no less punchy than its Reference forebear.

The rich texture of Gregory Porter's voice on 'Hey Laura' [*Liquid Spirit*; Blue Note] was as deeply poignant as I've heard just as the accompanying Hammond organ and bass developed a tremendous sense of (studio) ambience. I had thought the 2014 Reference lacked a little 'reach' and comparing both cables with a hi-res rendering of 'Take Five' from The Dave

LEFT: Chord's Signature XL is the first of its cables to be factory-terminated with the silver-plated 'ChordOhmic' spade connectors or 4mm banana plugs [illustrated above]

Brubeck Quartet's *Time Out* [Columbia/Legacy; 176.4kHz/24-bit] showed the XL version was able to tease out just a little more air and space and top-end definition. But it was very subtle, almost reverent, in its painting of that alto sax, metred by the piano and percussion behind. ♪

HI-FI NEWS VERDICT

Now in XL guise, Chord's Signature retains the combination of low capacitance and resistance that's always ensured it's behaved consistently with a range of different amplifiers. This is not something that can be said of all speaker cables in this price band... Moreover the switch from PTFE to a compliant XLPE dielectric seems to have brought a welcome extra bite, without grain or coarseness, to the upper registers.

Sound Quality: 81%





★
**BEST
LOUDSPEAKER
CABLE**



CHORD SARUM T

Reviewed: November 2017 issue

It's rare that something truly different comes along in the world of loudspeaker cables – but Chord's new Sarum T is just that.

The reason? It uses a material called Taylon for its dielectric - which, under a different name, is used in the military and aerospace industries to ensure signal integrity at all operating temperatures.

Many cables impart a particular character on the music but the most impressive thing with the Sarum Ts is the absence of just that. It means the performance comes to the front with no smear or sense of constriction. Everything seemed improved once plugged in – from timing to instrumental cohesion.

Only the very best 'speaker cables do that and these warrant a place among that elite group.

They are easily as good as some much more expensive rivals, being open, uncoloured and superbly natural – letting you hear the sound of your amplifier and loudspeakers as they should be.



★
**BEST
INTERCONNECT
CABLE**



Chord Company
Signature Tuned ARAY

Reviewed November 2014 £765 1Mtr Pr

One of Chord's flagship cables, the Signature Tuned ARAY is made from high-quality silver-plated conductors and PTFE insulation with two layers of silver braid for screening. This is covered with a white PTFE outer extrusion, and Chord fit ultra-low mass RCA plugs. The silver pin is in turn surrounded by PTFE insulation, as is the silver-plated return connector.

In use the Chord Signature had exceptional spacial separation, making tracking instruments easy on even the most complex pieces of music.

Michelle Adamson's vocals on Shpongole's 'Brain In A Fish Tank' had space to flow naturally, while the layers and differing textures of the sounds were clearly delineated.

On Bach's 'Preludes And Fugues' the music had a palpable body and natural flow not evident on lesser interconnects. "The pieces sounded far more natural and flowing" we said. "The harmonics were so successfully decoded that it was like listening to a more life like rendition of the music".

Chord's cords

Tony Bolton explores the capabilities of the latest versions of some tried and trusted interconnects from the Chord Company.

The model names of Chorus, Anthem and Signature have been featured on the Chord Company product list for a number of years now, but recently they have all undergone upgrades and are now in Mk 3 configuration.

The most affordable of the three is the Chorus Reference priced at £350. This is a new design with a tri-conductor configuration using silver-plated oxygen free copper and insulated with PTFE. The conductors are arranged over a spiral and shielded with a 95% coverage woven braid and heavy gauge foil. Chord's VEE 3 plugs are fitted, made with an ABS outer shell, silver plated contact areas and PTFE insulation around the central pin.

The £450 Anthem Reference interconnect uses heavy gauge, silver-plated oxygen-free copper connectors arranged in a repeating spiral and insulated with PTFE. The cables are then over-extruded with PVC to minimise mechanical noise. The shielding is provided by a dense braid and a heavy gauge foil over-wrap. VEE 3 plugs are fitted.

The most expansive cable in this review is the £765 Signature Tuned ARAY interconnect. This replaces the Signature Plus in their range and is a new design made with high-quality silver-plated conductors and PTFE insulation and two layers of a high density silver braid for shielding. This is covered with a white PTFE outer extrusion. Chord's ultra low mass RCA plugs are fitted. The silver-plated pin is surrounded by PTFE insulation, as is the silver-plated return connector. This is covered with a machined acrylic plug casing.

After thoroughly running in each cable on my Blue Horizon Cable Burn In Accelerator, each one was listened to for an evening before doing comparative listening with CDs of Ivo

Janssen playing Bach Preludes and Fugues on the piano (VOID Classics. VOID 9812) and Shpong's 'Museum Of Consciousness'. (Twisted Records. TWSCD45).

I started my listening with the Chorus cables and was presented with a big, quite warm and easy-going sound that was underpinned by a very solid bass. The central image of the flute in the first part of Shpong's opening track 'Brain In A Fish Tank' was very strong and the sound seemed to be very firmly placed just within the speaker boundaries. The piano sounds in the Bach were good, although I felt that the harmonics on a heavily struck chord using the sustain pedal showed slight traces of confusion in the definition of the sound.

Changing cables to the Anthem gave a very different presentation of the same tracks. Although the central image was still a focal point, I felt that the sounds to either side of it were more integrated to it creating a more cohesive soundscape. The bass seemed to move a little more freely and I had a perception of greater weight and agility to the rhythm.

Janssen's piano was better displayed with more attention seeming to be focussed on the intimacies of his touch on the keyboard. The music felt as though I was better able to explore it easily and the detailing of the ringing harmonics were more obviously displayed.

There is quite a jump in price to the Signature interconnect (£765) but the improved performance seemed commensurate with this. Michelle

Adamson's vocals in 'Brain In A Fish Tank' had far more space to flow naturally than with the previous two cables and I was very much more aware of the layers and the differing textures of the sounds, both natural and electronic in this track.

The Bach pieces sounded far more natural and flowing, with the harmonics successfully decoded so that I felt I was listening to a more lifelike rendition of the music.

All three cables seem to offer good performance for the prices. The Chorus should suit leaner sounding systems while the Anthem will provide a shot of bass driven adrenaline for those that need it. The Signature stands head and shoulders above both and, despite the price, offers, I feel, excellent value for money.



CHORD COMPANY CHORUS REF. £350.00 1MTR



EXCELLENT - extremely capable.

VERDICT

Smooth and rich sounding interconnect. Will suit lean or thin sounding systems.

FOR

- full bodied sound
- solid bass

AGAINST

- may be too warm sounding for some systems.

CHORD COMPANY ANTHEM REF. £450.00 1MTR



OUTSTANDING - amongst the best.

VERDICT

open and spacious sound with excellent imaging.

FOR

- focussed soundstage
- excellent dynamics
- good treble detail

AGAINST

nothing at the price

CHORD COMPANY SIGNATURE TUNED ARAY £765.00 1MTR



OUTSTANDING - amongst the best.

VERDICT

good vocal projection combined with tight timing and a natural tonality make this cable extra special

FOR

- accurate texture and timbre
- good focus on micro details

AGAINST

- nothing, not even price

The Chord Company
+44 (0) 1980 625700
www.chord.co.uk



Cables Section

This month Tony Bolton looks at The Chord company cables.

The Chord Company was founded in 1985 by Sally Kennedy to satisfy the demand for high quality interconnect cables for use with Naim equipment. Two years later the first version of the Cobra interconnect was introduced, followed a few years after that by the original version of the Chameleon. The new versions of both these cables, alongside the new Crimson model are under review here.

As is my usual practice, I gave each cable 48 hours running in on a Blue Horizon Proburn cable burn in accelerator, before settling down to do some listening with the leads connecting the Leema Acoustics Antilla 2S Eco CD player to the matching Tucana II amplifier. I listened to each of the cables for a few hours before doing the comparative listening using the aria 'Celeste Aida', from Verdi's opera of the same name, as sung by Placido Domingo ('Domingo Favourites', Deutsche Grammophon 445 525-2) and the track 'Ja Vidi' by Christophe Goze from the album 'Chill Arabia III' (Bal De Lune records. LUNECD19). This being a fusion of Middle Eastern and contemporary Western beats and sounds.

HI-FI WORLD

INTERCONNECT CABLES CHORD CRIMSON VEE 3

**CHORD
CRIMSON VEE 3
INTERCONNECT
£55 FOR 1M**



EXCELLENT - extremely capable

VALUE - keenly priced

VERDICT

A big sounding cable that will add a bit of zest to a flat sounding system.

FOR

- fast bass
- good imaging
- well projected mid-range

AGAINST

- slightly forward high frequencies

The Chord Company Ltd.
+44 (0) 1980 625700
www.chord.co.uk



The new Crimson cable has taken the place of the Chrysalis as the starting point in the Chord range. It uses two sets of multi-stranded oxygen free copper conductors, arranged in a twisted pair configuration and covered with a

dual layer shield. The ABS plug casing is new and covers gold plated contacts inside the RCA phono plug.

SOUND QUALITY

Starting with the Domingo piece, I was immediately struck by the impressive level of bass output for a

cable at this price point. Although not hugely deep, it gave an impression of weight and solidity that surprised me. Domingo's voice was quite well handled although there was a tendency to a slightly nasal quality to his voice.

Changing to 'Ja Vidi' I found that the opening drum beats were well described and the beat had a fair amount of get up and go to it. Mid range sounds had a strong presence although the tambourine had a slightly splashy quality to it.

CONCLUSION

Bearing in mind that this cable will be partnered with budget electronics, the tonal balance should add a bit of zest to the sound while retaining a good overall balance. It could be a little forward for some systems though.

INTERCONNECT CABLES THE CHORD COBRA VEE 3



This new incarnation of the tried and trusted Cobra interconnect is made with twin silver-plated oxygen free copper conductors, insulated with FEP and covered with what is described as a high density, high frequency shield. The VEE 3 RCA plug is silver plated and con-

nected to the lead with silver solder.

SOUND QUALITY

This time Domingo's voice had somewhat greater body and depth to it. The trumpets were better controlled and smoother sounding, while the violins seemed to reach higher than they managed on

the Crimson, but sounded more controlled and realistic.

The tambourine sounds on 'Ja Vidi' certainly sounded more inviting through this cable, losing the slight splashy effect and gaining a more three dimensional shape. The bass was noticeably deeper and I felt as though I could see the bottom of the note more clearly. The mid-range had a better sense of integration into the music and the whole sound felt better balanced.

CONCLUSION

I have a 20 year old pair of Cobra interconnects and comparing these to the new model, I could hear the family resemblance, but the performance of the new model is streets ahead in every aspect. This lead is well enough mannered that it could be used in a far more expensive system without disgracing itself.

**THE CHORD
COBRA VEE 3
INTERCONNECT
£95 FOR 1M**



OUTSTANDING - amongst the best

VALUE - keenly priced

VERDICT

A well mannered interconnect that punches above its price point with a smooth and well integrated sound.

FOR

- balanced sound
- open soundstage
- smoothness

AGAINST

- nothing at the price

The Chord Company Ltd.
+44 (0) 1980 625700
www.chord.co.uk

INTERCONNECT CABLES CHORD CHAMELEON VEE 3



This is another long-standing design that has had an effective make-over. The insides consist of three sets of silver-plated conductors, covered with a 93% braid and a cotton fibre wrap to suppress mechanical noise. The RCA plugs are

silver plated with an ABS outer shell.

SOUND QUALITY

For the first time I found that I was being made aware of the background sounds and echos in the studio. Each of the performers seemed to have gained some space around them

and it made for a very inviting listen. The texture of all of the sounds was filled out and better described, with the attack of the trumpets having particular impact, although it was very well controlled.

The sway of the rhythms in 'Ja Vidi' seemed to be more obvious with this cable and the soundstage seemed to be occupied by sounds that had matured and put on a little weight. The bass seemed to go very deep and be quite substantial, whilst retaining a good level of agility.

CONCLUSION

This is a cable that, despite the fairly moderate price, offers performance that is significantly above that expected at this price point. It is well mannered, smooth and detailed. It may be too revealing for budget electronics though.

**CHORD
CHAMELEON VEE
3 INTERCONNECT
£120 FOR 1M**



OUTSTANDING - amongst the best

VALUE - keenly priced

VERDICT

An excellent cable offering a taste of real high end performance at an affordable price.

FOR

- smooth treble
- very deep bass
- open and detailed sound

AGAINST

- can be revealing so partner carefully

The Chord Company Ltd.
+44 (0) 1980 625700
www.chord.co.uk

Digital Chord

Resident analogue head Tony Bolton finds some digital interconnects that tickle his musical tastebuds.

From their base on Salisbury Plain, near Stonehenge, the Chord Company have been busy creating a new range of digital interconnects using their 'Tuned ARAY' technology.

They are tight-lipped about the details of this new configuration so I can only give you basic details about the construction of these cables.

But, suffice to say, anyone who believes digital interconnects don't make a difference should take a listen to these.

After running the cables in for 150 hours I listened to a range of music and settled on a CD of Janis Joplin performing at Woodstock Festival in 1969 (Columbia/Legacy 88697 48243 2) for the comparative listening. This was played via my Njoe Tjoeb 4000 Reference CD player with the interconnect sending the signal to my Teddy DAC (which upsamples to 24/192).

The most affordable of these three leads is the Anthem. This cable is made with solid core silver-plated conductors, insulated with PTFE and shielded with foil and a high-density braid. This is covered with a PTFE outer jacket. The plugs are Chord's own VEE 3 RCA plugs with an ABS outer shell and silver-plated connectors.

Compared to the cables supplied by most manufacturers with their equipment this cable is light years ahead in every aspect of the sound. I found Joplin's vocals projected forward of the musicians and disentangled from the morass of sound that had previously surrounded it.

The bass sound gained definition and allowed me to follow the rhythm more accurately, while treble sounds were far smoother and more palatable.

After such a good performance I was interested to see

how much it could be improved and was not disappointed by the results when I plugged in the Signature interconnect.

This is a bulky lead that uses high-purity, single crystal solid core conductors, insulated with gas-foamed polyethylene.

There is a dual layer composite shield, a high-density braided shield offering 95% coverage in conjunction with a semi-conductive shield layer. Chord's own ultra-low mass RCA plugs are used.

Although it costs nearly twice as much as the Anthem, I felt the Signature offered excellent value for money with a performance that was, to my ears, twice as good.

The soundstage seemed to become a lot bigger, with space and a little depth visible between the performers.

The bass sound gained a little in weight but a lot in descriptiveness, letting the boogying nature of the bass line on 'Try (Just a Little Bit Harder)' really getting going.

The vocals gained in clarity and I was aware of the background hums and noises from the equipment for the first time.

The Indigo interconnect uses a polished silver-plated copper conductor, insulated by PTFE and surrounded by a combination shield of high-density silver-plated copper braid and heavy gauge silver-plated foil. Precision machined

acrylic plugs with PTFE insulation are fitted.

Now I found the sound had a depth and vibrancy that I have not heard through this part of my system before.

Micro details of Janis Joplin's gravelly voice and her relationship with the microphone were obvious - as was the speed of the attack of the guitar notes. Drums had real punch behind their sound and I felt the timing had much more cohesiveness.

I felt that the Signature offered the best combination of sound-per-pound, the Anthem giving a dramatic improvement over stock cables.

But the real delight was the Indigo. It offered insight and musicality and made listening to digital sources a far more involving experience.



CHORD CO ANTHEM DIGITAL TUNED ARAY £230.00 1M



OUTSTANDING - amongst the best

VERDICT

good sounding cable that offers a detailed take on sound with well projected vocals and good timing

FOR

- timing
- strong central image
- good bass presence

AGAINST

- nothing at the price

CHORD CO SIGNATURE DIGITAL TUNED ARAY £410.00 1M



OUTSTANDING - amongst the best

VALUE - keenly priced

VERDICT

excellent performance for the price with open and dynamic sound

FOR

- good boogying rhythm
- wide soundstage
- well-textured sound

AGAINST

- nothing

CHORD CO INDIGO DIGITAL TUNED ARAY £910.00 1M



OUTSTANDING - amongst the best

VERDICT

superbly open and detailed sounding cable with beautifully timed and solid bass sound

FOR

- fast powerful bass
- open and spacious sound
- obvious background info in recording
- good timbre

AGAINST

- price

Chord Company
+44 (0) 1980 625700
www.chord.co.uk

Striking A Chord

Jon Myles listens to Chord's new budget interconnect – and comes away impressed.

Anyone with an interest in cables will be well aware of the Chord Company's proprietary Tuned Array range. The technology was originally developed for company's digital cables - but it was soon found it also brought improvements to analogue interconnects and power leads.

In fact, we found the Signature Tuned Array interconnect such an impressive performer we named it Hi-Fi World's Best Interconnect Cable in our 2014 Awards issue.

The only problem is the Signature will set you back some £765 for a 1 metre length. But now Chord is trickling down the Tuned Array technology to its more affordable ranges – most impressively in the shape of the new C-Line interconnect which comes in at just £45 for a 1 metre length or £35 for a 0.5 metre pair.

To help achieve the cost reduction, the C-Line is the first Chord cable to be assembled by a third-party partner in Taiwan. Not that you'd know on unpacking. Construction is very much up to Chord's traditionally high standards with the C-Line utilising oxygen-free copper signal and return conductors with a high-density foil shielding

and gold-plated conductors with a moulded plug protector.

Bear in mind Chord also stresses that all its cables are directional with small arrows indicating the direction of signal travel. I'm slightly sceptical about these sort of claims for cables – but if the manufacturer recommends it, it's usually best to take their advice.

SOUND QUALITY

Swapping in the C-Line for my usual Van Den Hul interconnect (which costs more than twice the price of the Chord) and it's obvious this is no run-of-the-mill budget interconnect.

Its sound is extremely clear and open with a dynamic range which belies its price. On Led Zeppelin's 'Dazed And Confused' bass had great extension and wallop while Jimmy Page's guitar work was relayed with the necessary bite and presence.

Indeed, the C-Lines seemed to separate instruments much more effectively – giving the music more room to breathe. This was especially evident on complex jazz. Ornette Coleman's 'Free Jazz' can descend into an unpleasant cacophony through some budget cables with the sound too blurred to be enjoyed. But the Chords cut through the squall to allow you to hear exactly what the various musicians were doing.

If anything, there is a slight degree of warmth to the overall sound – but that can be no bad thing when used with budget equipment. Certainly the complex synth work of Kraftwerk's 'Minimum-Maximum' came across with due resonance and – while treble is slightly curtailed compared to more expensive interconnects – it means there's never an unpleasant screechiness to the music.

Instead, play something with real rhythmic swing and the C-Lines allow the music to flow naturally without imposing too much of their own character on the presentation.

CONCLUSION

As budget interconnects go, the Chord C-Line is up there with the best – and could easily go head-to-head with some rivals costing twice as much. Build quality is excellent but, more importantly, it has a lovely, open sound with good frequency extension, firm bass and smooth mid and treble. Anyone looking for a good interconnect without breaking the bank should put this at the top of their list.

CHORD C-LINE
£45 FOR 1 METRE,
£35 0.5 METRE
VERSION



OUTSTANDING - amongst the best.

VALUE - keenly priced

VERDICT

Brings the benefits of Tuned Array configuration down to a new price-point. Hard to beat at the price.

FOR

- dynamic range
- good bass
- clear and open

AGAINST

- nothing at the price

The Chord Company
 +44 (0)1980 625700
 www.chord.co.uk



Interconnect Cable of the Year

The Chord Company Sarum Tuned ARAY

Chord's original top cable – Sarum – was already one of the best-received interconnects from the brand when the company announced its Tuned ARAY upgrade. And it really is an upgrade – users of existing runs of Sarum can have them upgraded to include the 'TA' modification. Tuned ARAY is essentially the addition of a short additional 'tail' of Sarum cable attached to one terminated end of each cable. This came from experiments designed to reduce reflections in 75ohm digital cables, and Chord found the benefits applied almost universally (loudspeaker cables do not benefit, apparently). In both a standalone test and reviewed in context of a complete Sarum/Sarum TA system, the level of performance is akin to upgrading your amp. Sarum TA improves on overall coherence and especially consistency, bringing the performance of components in the system into line. And if you have Sarum, upgrade it to TA now! (Reviewed in Issue 115).



EQUIPMENT REVIEW

Chord Company Sarum Tuned ARAY analogue & digital interconnects

by Jason Kennedy

A few months ago I took a trip to the Chord HQ in Amesbury to see how they go about the business of cable building. I had a go with a soldering iron and discovered the delights of the canteen, but the purpose of the trip was to find out what Nigel 'the cable doctor' Finn had been getting so excited about. I had a brief dem of Tuned ARAY at the Bristol show and it was unusually convincing and I was keen to try the stuff at home, so the visit was a way of finding out more and persuading Nigel to lend me some of his new white cables. At that point Tuned ARAY had only been applied in the range topping Sarum interconnects, it has been subsequently employed in three more digital coax cables with prices starting at £220 for Anthem Digital TA. The dem that Nigel gave me in Amesbury involved a straight comparison with standard Sarum via a system with Spendor D7 speakers and electronics from Sony and Naim among others. It was very convincing and pretty loud, but the change to Tuned ARAY brought about an increase in musical coherence the like of which I've not previously encountered. Splashy, hard, messy sounding recordings turned into a group of musicians playing together in perfect time, it was uncanny. I had to have some of that.

The first example I got hold of was Sarum TA digital coax, which I believe was the first example of Tuned ARAY that Chord Co put into production. It costs £100 more than its predecessor but looks just the same, so what gives? That's the tricky bit, Chord Co won't

say, it's one of those secret ingredient type things that they'd rather not share. You could buy some and dissect it for analysis I guess, but from the few hints I've garnered this would not necessarily tell the whole story. Suffice to say that the clue is in the name, this is a tuned cable, but how do you tune a cable.

Sarum Digital Tuned ARAY is a very stiff cable with silver plated conductors, insulated with air foamed PTFE insulation and a very high density silver plated spiral shield. The stiffness is to provide mechanical damping which Chord considers to be more important in digital cables than it is in analogue ones, the white cable jacket is PTFE, also for damping purposes. The plugs are silver plated as well and have acrylic surrounds in a further effort to minimise vibration.

Sarum TA analogue interconnect is very similar in appearance to the digital but costs half the price (you get two metre lengths for your £1,600), so I asked Nigel what it was that differentiates them. They are both coaxial types, apparently, but the digital has a solid conductor and the analogue stranded. Both use micro polished silver plated copper conductors, but the analogue has a foil screen with a silver plated braid, while the digital has a very high density spiral shield, also silver plated. That, according to Nigel, is what costs the money and provides the extra noise protection that digital cables need. ▶

▶ I got a similarly stonking result with Sarum Digital TA at home; in fact, it was the cable I used when discovering just how remarkable the MSB Signature Data CD IV was in issue 104. In that instance, it provided a sense of drive, dynamics and power that brought the sound to life. Other cables have a similar sense of pace and power but seem to lose coherence when you throw something hectic at them. With simple singer/songwriter stuff, the value of this cable is not so obvious what you need are large symphonic works or high energy rock bands, music with plenty going on. The stuff that systems tend to struggle with in other words. Put on the TA digital after any other competing product and the band/orchestra starts playing cohesively. The rhythm and timing are the key to this, it's a case of when the going gets tough it's gotta stay tight. You need to be able to hold onto the groove to be able to fully enjoy the material. If that's difficult then your brain will be working too hard to relax. This is one reason why live music works better than reproduced, there is no processing going on between the source and the sound.

That was what I heard with a BNC to RCA adaptor at the send end of the cable, when connected between a Naim Unitiserve and the Cantata DAC. Nigel realised that this was a compromise and sent over an appropriately terminated length. Now the presence became phenomenal and the bass was pulled into line, with the result that Sting's bass on 'So Lonely' was now dubworthy. I know, hard to believe, but for a while there the Police were a great band, they did after all have Stewart Copeland on drums and there was plenty of animosity between them. A recipe for success or failure but one that can make the difference.

Getting the Sarum TA analogue interconnect into the system produced a less immediate result in truth, initially it just seemed to emphasise the upper mid which benefitted timing and propelled the music more emphatically. Then I put on 'The Immigrant Song' from Led Zeppelin's *How the West Was Won*, not a great sounding performance under normal circumstances and one that gets very messy at full tilt – the level it has to be played at. Shifting to the Sarum TA analogue under that circumstance was revelatory, again the coherence was wound up to 11 and the mess disappeared to leave the world's greatest rock band throwing it down in unstoppable fashion. Jimmy's guitar solo comes through in double mono, presumably for a bigger sound but this doesn't undermine his performance one iota.

I highly recommend that other cable manufacturers investigate what Chord Co has done here. This is a genuine step forward, a sea change in revealing just how important cable is. Despite what the hype says, you don't get this much progress in one step very often. If you like your music to sound really real, you owe it to yourself to check out Tuned ARAY and preferably in the PTFE sheathed guise of Sarum. +



TECHNICAL SPECIFICATIONS

Sarum Tune ARAY stereo RCA pair

Topology: coaxial 50 Ohms

Conductors: micro polished silver-plated copper

Insulation: foamed PTFE

RCA plugs: ultra low mass, precision-machined acrylic

Shield: foil & silver plated braid

Price: £1,600/1m pair

Sarum Digital Tuned ARAY digital interconnect

Topology: coaxial 75 Ohms

Conductors: micro polished silver-plated copper

Insulation: foamed PTFE

RCA plugs: ultra low mass, precision-machined acrylic

Shield: high density silver plated spiral helix

Price: £1,600/1m

Manufacturer: The Chord COmpany

URL: www.chord.co.uk

Tel: +44 (0)1980 625700

Chord Sarum Tuned ARAY cable system

by Alan Sircom

In issue 107, *Hi-Fi+* regular Jason Kennedy enthused over Chord's Sarum Tuned ARAY cables in a digital and analogue interconnect context. But *Hi-Fi+* has by tradition determined the true potential of a cable in a full front-to-back context, also dubbed the 'coherent cable loom'. The Chord Sarum Tuned ARAY is an excellent example of this ethos in action, and demonstrates the importance of getting all your ducks in a row, from an audio perspective.

There's a commonality to the cables. They all use 'micro-polished' silver-plated multi-stranded oxygen-free copper conductors, with gas-foamed PTFE insulation, and heavy gauge foil shielding throughout. There are three conductors twisted around one another (two conductor sets for the speaker cable), with one send-two receive conductors in the inherently directional interconnects. The power cords are terminated with high-grade Furutech plugs and sockets, while Sarum interconnects use Chord's own low-mass silver-plated copper and acrylic plugs. The speaker cables can be terminated in 4mm or spade lugs, but – as with all products in the Sarum range – this must be performed at the Chord factory.

How Tuned ARAY came about was from Chord's digital cable models. One of the issues in a 75 ohm digital coax cable is it's very difficult to keep it consistent (BNC improves matters, but the standard RCA phono is almost perfectly designed not to maintain a consistent 75-ohm impedance across a cable). Chord tried to find ways to reduce reflections in the cable, and experimented with using a short additional tail connected at one end of the cable, not unlike a flying earth lead, only internal (so not 'flying'). This worked... and worked a whole lot better when the tail was 'tuned' to the length of the cable itself. And the subsequent improvement wasn't just applicable to the digital domain; it applies across the board. Well, almost... Tuned ARAY benefits apply to RCA and XLR interconnects, USB and 75-ohm digital interconnects, 'streaming cable' (it can't be called Ethernet cable because the Tuned ARAY is not bi-directional), and power cords, but the loudspeaker cables are not subject to the same demands, and Chord hasn't found a way to apply the Tuned ARAY technology to loudspeaker cables.

Taken individually, the Chord Sarum/Sarum Tuned ARAY cables deliver a sound more like a really well-thought-out component upgrade, than a change in a passive component. To be perfectly honest, I'm used to hearing very good cables, but the level of improvement these bring about is fairly substantial. You need to have very good equipment in order to benefit from Sarum/Sarum Tuned ARAY (because you stand a chance of highlighting



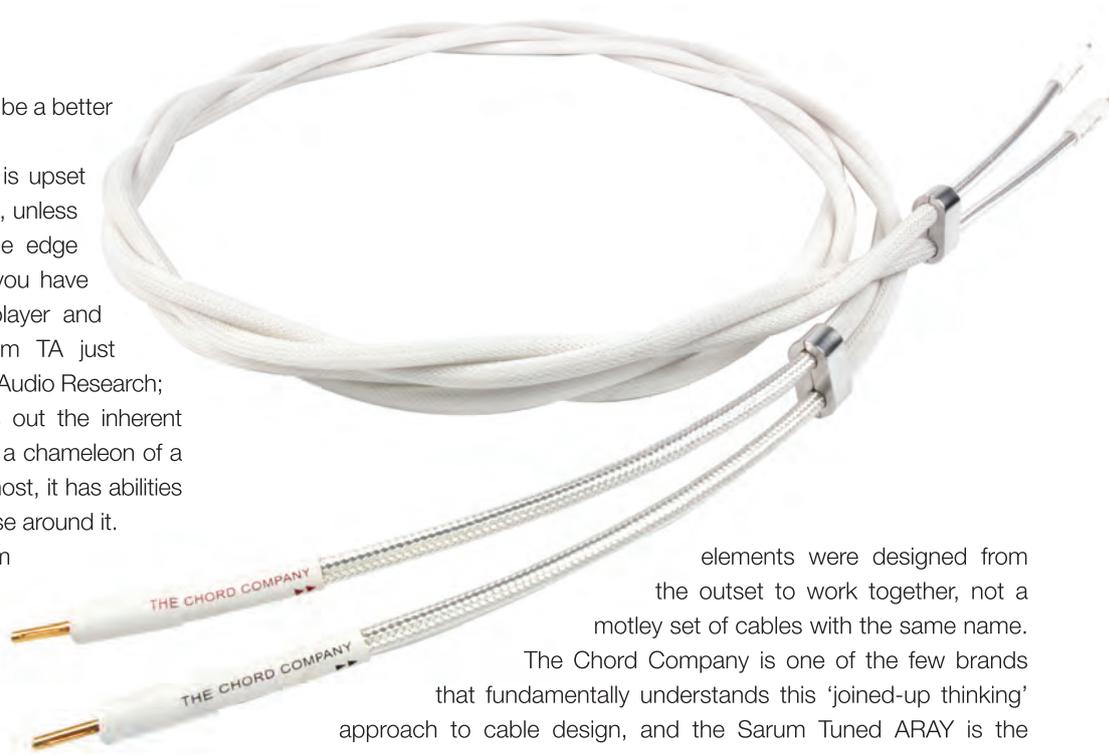
weaknesses in mediocre electronics), but that's fairly likely, given the price. As with pre-Tuned ARAY Sarum, it simply draws you into the music, leaving the reviewer with a note pad full of musician's names. Sarum shows you why you like music, and why you like given musicians. It's not a panacea – Sarum will never make me like Eric Clapton, for example – but it will make me want to run out and buy the next Kurt Vile album based on his last, so precise Sarum's musical insight. There's a greater sense of balance and order to the sound – the level of insight into the music could be mistaken for brightness with Sarum, and this is replaced here by absolute clarity. I didn't have a pair of Beryllium-tweetered Focals around for this test, but I'm convinced where the Sarum and Focal mix was not a good one (two insights making a ▶

► brightness), the pair would be a better match now.

What this doesn't do is upset the balance of your system, unless it is more teetering on the edge rather than 'balanced'. If you have an Audio Research CD player and amplifier, the Sarum/Sarum TA just reminds you why you liked Audio Research; if you use Naim, it brings out the inherent properties of Naim. It's not a chameleon of a cable, but like the perfect host, it has abilities to bring out the best in those around it.

Use a complete Sarum run, however, and, these properties increase significantly, coupled with a clarity that takes on a depth and physicality leaving you hungry for more music. It's like you started taking lessons in music theory; the sounds you hear just become that much more understandable and correct--not simply tonally, or even temporally, but in terms of melody, harmony, counterpoint, and form. And the really weird part is that the Sarum helps you 'get' musical interval in a way that normally requires a lot of ear training. This suggests a system whose

“This suggests a system whose elements were designed from the outset to work together, not a motley set of cables with the same name. The Chord Company is one of the few brands that fundamentally understands this ‘joined-up thinking’ approach to cable design.”



elements were designed from the outset to work together, not a motley set of cables with the same name.

The Chord Company is one of the few brands that fundamentally understands this ‘joined-up thinking’ approach to cable design, and the Sarum Tuned ARAY is the company's ultimate expression of that approach.

Paradoxically, this does not in any way undermine the findings of Jason Kennedy in issue 107. The process of getting all your musical ducks in a row is not an easy one, and many find it a hard concept to fathom. They will be drawn to reviews of individual cables to find ‘the best’ for their system. And Chord Sarum Tuned ARAY will, in many systems, be that ‘best’, in the ways intimated by Jason Kennedy in issue 107. But this is also a beachhead for that global concept. The Chord Sarum Tuned ARAY interconnect delivers the sort of coherence and insight that makes you able to listen into music at all kinds of volumes and gives you the ‘wow’ factor a really top-class interconnect can bring to the table. But, when you begin to hear the same things happening to the same extent and in the same direction by adding Sarum Tuned ARAY loudspeaker cables and power cords, it starts to push the hodgepodge random assemblage of cables formerly used out, and the global approach takes over.

The naysayers will dismiss this as so much audiophile folly. They will suggest that input and output impedance alone define any possible differences in the electrical connection between two devices. They will also say there is no magical properties imbued by one cable that can be transferred across the entire system. Finally, any suggestion that a power cord can make any difference to the performance of a component will be met with a series of guffaws. They might be right to think there is no way that Chord's Sarum Tuned ARAY used in a complete systemic context can have an effect that makes the sum of the system sound greater than its component parts. But I don't think so. I think most people who listen to their system for enjoyment instead of point-scoring will like what Sarum Tuned ARAY does between individual components and they will like the results even better as a more complete set of Sarum Tuned ARAY cables is inserted into the system. In part, because what the Tuned ARAY concept seems to bring to the table is a sense of consistency, levelling the differences in input and output impedance

between products. As a result, I think they will like what the whole 'ducks in a row' cable system does so much, that they will look upon the arguments of the naysayers with incredulity.

Normally, the kind of cable systems that demonstrate this level of systemic performance boost have the word 'monocrystal' in the description; and typically that means recabling a system in a global context represents a major financial investment. Chord Sarum Tuned ARAY is not a trivial investment if you think of it in whole-system terms, but that investment is in line with the kind of top-end equipment with which it works. In other words, it's the cost of a new car, rather than the cost of a new house. That doesn't make it a bargain, but it does make it attainable over time... and given that the performance of Chord's own Indigo Tuned ARAY and Signature Tuned ARAY are in the same 'groove', it *is* possible to make a full Sarum Tuned ARAY cable system a goal to be attained over time, in a structured upgrade path, should you wish.

Finally, for owners of pre-Tuned ARAY Sarum; Chord can upgrade your cables. It makes a huge difference, in all the ways that made you buy Sarum in the first place, without any downsides. Just do it. +

TECHNICAL SPECIFICATIONS

Conductors: Precision polished, heavily silver-plated, multi-strand copper, three conductors per cable (RCA, power), two in loudspeaker system

Shielding: High density heavy gauge foil dual system

Dielectric: Internal foamed PTFE
Ultra-lightweight contact acrylic damped RCA plugs (interconnects), Furutech power connectors (power), custom 4mm, spadelugs of BFA connectors (loudspeakers)

Price: £1,600 (2x1m, RCA interconnects), £1,650/1.5m pair (speaker cable) + £550 per additional mono metre, £1,100/1m (power cord)

Manufactured by: The Chord Company

URL: www.chord.co.uk

Tel: +44(0)1980 625700



EQUIPMENT REVIEW

Mark Levinson No.585, Vienna Acoustics Liszt, Chord Co. Sarum T

By Roy Gregory

Hi-fi, just like any other arcane (and borderline obsessive) activity has generated its own set of 'rules'. One that pretty much everybody seems to agree on is that the shortest route to sonic suicide is to assemble a system consisting entirely of the latest and greatest. Yet, look at the cast list for this system and you could be forgiven for assuming (admittedly within the context of our own reviews) that this is almost exactly what we've done.

Mark Levinson's No.585 is only the company's second-ever integrated amp. It steps straight into the shoes of the much-loved and highly respected No.383, a product that enjoyed a lifespan of over ten years, and remained a capable and competitive performer until the day it was withdrawn. Where a lot of companies have looked at reducing product dimensions, often by resorting to Class D output stages, MLAS have headed in the opposite direction. The 585 is an

inch taller, an inch deeper and, at 200 Watts Class AB watts per channel, boasts twice the output of its predecessor. At 72lbs it is also around 15% heavier than the 383 it replaces and, if it's lost one of the 383's balanced analogue inputs, it's gained a sextet of digital inputs instead, including the currently all-important USB. That's ten inputs in all, with three single-ended and one balanced analogue connection, two S/PDIF (RCA), an AES/EBU and two TOSLink as well as the USB – and believe me, those digital inputs are a big, big part of the 585's impressive performance.

Putting a DAC inside an integrated amp might seem like a good idea, but it's remarkable how seldom it works, with one half of the partnership seemingly, inevitably upsetting the other, so you either end up with an underperforming DAC or an uncomfortable amp. The Levinson is the rare exceptions to that rule – and how – but as we'll see that's something of a theme with this particular system. ▶



“The third element in this stellar, three-box ‘source plus’ system is the least obvious, but in some ways the most remarkable.”

► Which brings us to Vienna Acoustics’ Liszt, one of a series of recent speaker releases that have both redefined what’s possible for £10K and made it one of the most hotly contested price-points in the speaker market. The striking, slim, and beautifully finished Liszt is very much the conceptual, functional, and aesthetic offspring of the company’s flagship The Music, a speaker that is itself a considerable bargain when compared to the pricier and way-less pretty competition. The junior model shares the overall format, fit, finish, in-house drivers, and remarkable attention to detail of the flagship, at less than half the price. What you lose is a little sophistication in geometric adjustment and a lot of physical volume: what you keep

is most of the bandwidth, as well as the same standout, unobtrusive neutrality, and sheer musical integrity. So great looking, with superb performance and domestically unobtrusive, the Liszt might as well have Best Buy carved on its baffle – except that would mar the beautiful piano finish.

The third element in this stellar, three-box, ‘source-plus’ system solution is the least obvious, but in some ways the most remarkable. Cables get a pretty rough time and the higher the price the denser the flak. Chord’s Sarum cables have long represented the sensible face of the silly cable spectrum. They are far from cheap, but they’ve always stood shoulder to shoulder with cables at two or three times ►



EQUIPMENT REVIEW / MARK LEVINSON, VIENNA, CHORD SYSTEM



▶ the price. Except that now – and very much in the same spirit of ‘trickle down’ that informs the other components in this system – they’ve received a major material and performance boost in the shape of Tylon insulation, previously only (and by “only” I do mean ONLY) present in Chord’s flagship CHORDmusic cables. Nobody else uses this ultra hi-tech, high-performance (and high-priced) dielectric, with its claim of superior, zero phase shift characteristics – at least not in audio circles. Precision guided weapons are of course, another thing altogether. Sarum T looks set to raise the bar in this ultra-competitive sector of the cable market – and not by a little.

When it comes to the pairing of components and the construction of systems, it’s never long before the notion of product ‘synergy’ raises its head, as if putting systems together is a magical mix of proscribed knowledge and the dark arts. In fact, rather than being a case of creating a whole that’s somehow greater than the sum of its parts, great systems are simply the result of putting pieces together that don’t hinder each other, instead allowing each one to give of its best. It’s all a question of understanding the internal workings, the relationships between the various parts, their true nature, what they need, and the demands they place on each other. The problem is, that’s exactly what the marketing smoke and mirrors so often set out to blur and obscure. So here we have three best buys; three genuine trickle-down contenders and a trio of products that collectively tempt with their top-notch status, their heritage, unique technology, and the promise of genuine high-end performance at (almost) affordable prices. It’s a heady cocktail, but the real question is, for all the hoopla, the metaphorical shaking, and pink umbrellas, do they deliver the subtly seductive musical intoxication of perfectly blended ingredients – or does it all fall a bit flat?

In many ways the core ingredient in this system is the Mark Levinson 585 integrated amplifier. Not only does it offer a range of analogue and digital inputs to satisfy virtually any need, there’s the tantalizing prospect of an internal phono-

option to come. Tantalizing because, if the sheer quality of the internal DAC’s performance is anything to go by, MLAS have actually achieved the undiluted incorporation of their impressive top-end digital technology into a one-box, do it all amplifier. Levinson’s DACs have always offered amongst the most musical of digital reproductions and the 585’s internal unit is no different. It delivers a sound that is spatially, dynamically, and musically coherent – warm and inviting with tremendous presence and impact when required, but with a beguiling intimacy and delicacy, too. Hooking it up to the digital output of several serious one-box CD players and comparing that to their analogue outputs quickly established its superiority to all but the best standalone DACs – and that’s before you factor in the amplifier itself.

Reputedly, beefy integrateds are ten a penny these days. Do-it-all amplifiers loaded with digital inputs are even more common, but a genuinely big, unquestionably beefy amplifier that really does it all and does it all really well – now that’s a rare beast. If that was all the 585 offered it would still be a steal. But the Levinson integrated has another trick up its ▶



▶ sleeve – one that makes it very special indeed. Are there better sounding amps than the 585? Yes there are – but they are all, without exception more expensive and much more demanding (or fussy) when it comes to set up and partnering equipment, especially cables and speakers. In stark contrast, you can hook up the 585 with anything and everything and it never, ever sounds less than engaging, unflappable, and yes, downright fun! You remember fun: well, you will as soon as you start using the 585. This is a genuinely powerful and musically authoritative amp – and it likes nothing more than delivering that power, no matter what the situation, the source, or the speakers.

Talking of speakers, it's time to factor in Vienna Acoustics' contribution to the party. The Liszt is carefully considered and beautifully built, but in this day and age, it is seriously unusual in that it trades sensitivity for bandwidth. This speaker goes deep: much deeper than you expect – which in turn makes it very critical of placement and demanding of power. Fortunately, a large part of what makes the Liszt so impressive is the amount of thought that's gone into optimizing its set-up and interaction with the room. Throw in the 585's absurdly generous power delivery and ability to control a speaker's bottom end, and you've got the perfect recipe for serious scale and musical impact in a whole range of different rooms.

But as impressive a pairing as the 585/Liszt combination so obviously is, the addition of Sarum T cables raises the system performance to another level entirely. Of course, cables can't improve your system – they can only damage and diminish its performance. The question is how much damage they do to the fragile patterns and relationships that make up music and make up a great performance? CHORDmusic, the original Teylon cable, was notable for its utterly effortless and seamless continuity, both top to bottom and in temporal terms. It simply made other, comparably priced cables sound

“The Liszt is carefully considered and beautifully built, but in this day and age, it is seriously unusual in that it trades sensitivity for bandwidth.”



constricted, disjointed, clumsy and musically constipated – to such a degree that it offers a stern challenge to all comers, irrespective of price. Well, it turns out that Sarum T has inherited that character in full.

This cable really lets the signal breathe, pushing the musical performance to the fore and the system itself well into the background. So, the bigger the system's performance envelope the more effectively it is able to disappear – and this system has a big envelope, both in terms of bandwidth and dynamic headroom: big is no problem, loud is no sweat. In fact, the presentation is so open, the tonality so natural and devoid of edge or harshness, and the dynamics so uninhibited and engaging that it likes nothing better than to have its volume control well advanced. Unlike a lot of systems, you don't have to play this one loud, but boy are you going to get full value when you do. ▶



► Circumstances conspired to underline just how big a contribution the cables were making. Sarum T is new – so new that this system required the gathering up of all the existing product and the rapid manufacturing of some more. This meant I started off with a complete set of Chord’s next model down, the established and well-regarded Signature which served for a week or so as the system settled down and warmed up. The sound was comfortably familiar, impressively, big, bold, and fun. All of which made the transformation wrought by the arrival of the Sarum T all the more astonishing. A single example will suffice...

Around the same time that I put the original set-up together, the *La La Land* soundtrack [Interscope] dropped through the letter box, meaning that not only was it used for the burn in process, allowing me to hear how the system’s performance evolved, I’d only heard the disc on this system. Verdict? A nice enough recording, but a bit veiled, thin, and lacking presence and colour: pretty much par for the course for a modern CD. Emma Stone’s voice has been widely criticised as weak and you could certainly hear why – until I inserted the Sarum T! It wasn’t just like hearing a different recording, it was like swapping from a mediocre CD to a really good vinyl record: life, dynamic impact, presence, immediacy, tonal, and dynamic range – the whole thing just came to life. Stone’s voice is NOT weak – at least not on this showing. The dance numbers gained jump, pace, and drive; the band sounded like a much bigger and better band; the whole performance sounded more natural, more human, and way more engaging. The good news is that their hand-built nature means that original Sarum interconnect, digital, and power cables can be rebuilt to full Sarum T spec for around 45% of the price of the new cable. That’s not just unusual: once you hear the difference, that’s a slam-dunk.

Taking the system as a whole, I can reel off a laundry list of sonic attributes, from its dimensionality and a soundstage that’s expansive but not overblown, to its remarkable tonal differentiation, and the intimacy of its vocal delivery, its deep, powerful yet tuneful bass, and natural instrumental textures – but none of that is really the point. Time and again, playing familiar recordings, I was astonished just how readily this system fastened on and projected the quality, the sense

TECHNICAL SPECIFICATIONS

[Mark Levinson No.585 Amplifier](#): £10,500

[UK Distributor](#): Karma AV

[URL](#): www.karma-av.co.uk

[Tel](#): +44(0)1423 358846

[Vienna Acoustics Liszt Loudspeaker](#): £10,999 per pair

[UK Distributor](#): Audiofreaks

[URL](#): www.audiofreaks.co.uk

[Tel](#): +44(0)20 8948 4153

[The Chord Co. Sarum T Cables](#)

[1m Interconnects \(RCA\)](#): £2,100

[3m Speaker cables](#): £3,600

[1.5m Power cable](#): £2,400

[Manufacturer](#): The Chord Company

[URL](#): www.chord.co.uk

[Tel](#): +44(0)1980 625700

of purpose, humanity, and common cause that drove the performers captured on the disc. It’s an object lesson in what happens when you take an excellent set of electronics and an equally accomplished set of speakers – and then wire them up with a product that eliminates a major error mechanism, one which afflicts most other set ups. The Chord Company’s Tylon cables demonstrate emphatically just how much damage most other cables (even pretty good ones – even their own) can do. That realization is far from pretty. Sarum T is a product that demands to be heard, by cable sceptics and advocates alike. In fact, I’d go further than that – this is a system that demands to be heard. It serves as a timely reminder of just how musically arresting and how thoroughly enjoyable great hi-fi can be. Really good systems have an all-embracing, “can-do” quality. This one goes beyond that: it’s a “will-do” system: a system that will do the business whatever you feed it – big, bold, small, or intimate. Sit back and enjoy the ride – it’s quite a trip! +

The Chord Company ChordMusic Cables

by Chris Thomas



As anybody who has put together a music system of separates will tell you, cabling is not just important, its vital. Cables are the arteries of the system, carrying anything from potentially deadly voltages to the smallest and most fragile, complex signals, between the components. They do a lot of work, far more than is often thought and need to be right. Speak to any cable designer and they will tell you just how many issues there are to overcome and a look at the market will show that there are a huge number of designs available claiming to have come up with the answers. The fact that all cables sound different lets you know that, like audio reproduction generally, there is no absolute truth, only variations on a hopefully musical theme. Each designer will have their own way

of meeting the challenges which is presumably why there are so many flavours of sound available.

Cables are an antenna and they receive (and broadcast) all sorts of stuff at all sorts of frequencies, yet some of the very best are unshielded. But one thing all cable designers I have spoken to agree on is the importance of the dielectric. That's the material that covers the wire itself, the first layer of insulation. Its performance is critical given the way that a signal moves through the metal with the high frequencies apparently travelling along the outside surface. Zero material would be the best and least intrusive dielectric but, unless you are dealing with very short lengths within a component, an air dielectric where nothing comes into contact with the conductors between the end connectors is an impractical ideal. But, for a cable designer it is obviously of crucial importance and they are forever looking at new options to minimise or even eliminate the endemic side effects from this critical interface completely while maintaining the physical integrity of the design.

The Chord Company has been designing and manufacturing cables for over 30 years now and along the way it has gained a considerable reputation for quality and value. Chord's high-end models have been getting better and better, but it was a chance conversation that led to the creation of ChordMusic. When the company heard about what later became known as Tylon, it was by pure chance. But, after much negotiation, samples were sourced, and Chord's Nigel Finn eventually sat to listen to a cable shrouded in the new material. He realised, within very little time, that this was a game-changer. The objective then became to design a whole new suite of cables utilising Tylon's remarkable and desirable properties. The result is ChordMusic, a range of high-end audio cables that must be seen as their most accomplished and musically complete offerings to date. It is also the most expensive and musically certainly the most expansive. Ask The Chord Company what is so special about Tylon as a dielectric and they will certainly quote the fact that it is phase stable at room temperatures. I never really understood what this terminology meant but, after a long chat with the company's Alan Gibb I began to understand that this directly relates to the speed and sense of timing which was one of the first things they noted from the early listening sessions. I can see why. Listen to music on ChordMusic and you are immediately struck with the ease and clarity of musical movement which is only enhanced by its added sense of resolution and exceptionally clean focus.

Tylon is apparently one of those materials widely used by the military under another name and has never been incorporated into a design for linking audio electronics before. It goes without saying that it is expensive. It was



decided to enhance the construction of their Tuned ARAY designs even further and call it Super ARAY for the analogue and digital cables. This tuning system is different for each type of cable. Building a ChordMusic cable, in very general terms, begins with a slow extrusion of very high purity copper. Each strand must be as close to cylindrical as possible and is immediately micro-polished before being silver plated in an inert gas atmosphere to avoid any chance of oxidation. Then, after further polishing, the Teylon is directly applied. Three further layers of noise reducing materials are then introduced along each cable's entire length. The first one is designed to reduce levels of mechanical noise, the second to accurately constrain the noise reducing layer and then a metal braiding that is visible beneath the white covering and sparkles in sunlight.

ChordMusic speaker cable is a thick, rather inflexible design that will go round a corner but only in gentle curves. The terminations are supplied to order and as you might imagine, some of these have been specially designed for use with the new flagship range. RCA (now PTFE-bodied rather than acrylic), XLR and even DIN connectors are available and the streaming cables come fitted with high-speed RJ45 connectors in custom lengths to suit requirements. The speaker cable can be ordered with silver-plated (rather than gold-plated) 4mm plugs, made to The Chord Company specifications or spade connectors,

again silver-plated. The digital interconnects are made in both coaxial digital and AES EBU versions and even custom terminations can be accommodated like RCA to XLR for use with Devialet amplifiers. The message is that these are at the very top of The Chord Company catalogue and are custom-constructed cables in every sense of those terms.

I was supplied with enough ChordMusic to fit the whole of my home system. This currently comprises a dCS Vivaldi and DAC, a Vitus SIA-025 integrated and a pair of Wilson Audio Duette II speakers although I also use a pair of the superb Radio D1.1 models too. This is quite a cable-hungry system, especially when mains leads are taken into consideration. A USB cable is under development, but wasn't available in time for the review. ▶



▶ As I see it, a review like this can really only ever present a limited snapshot of any cable's wider capabilities. It's one unique system installation, in one room. I decided to dive in and change all the supplied cabling in a single go. I am not a particularly firm advocate of the system cabling needing to come from the same manufacturer as I doubt this is the way that most installations are arrived at, but it's not a bad idea. I had been assured that all the supplied cables had undergone a degree of running-in, but chose to delay the review for several weeks to give them a chance to settle and myself the opportunity to get used to what I anticipated was going to be a considerable change in the musical experience.

Initially ChordMusic was certainly quite different from the cables I had been using. Tonally and speed-wise the music was presented differently enough that I could almost believe I was listening to alternative mixes of material on my current playlist. The ChordMusic was immediately bigger, the music more ambient and reverberant, and had a slightly darker overall tonality. But it was powerful, very delicate when it needed to be, and carried impressive weight and strength of delivery. Those early experiences and thoughts never really changed fundamentally as the weeks passed and the system seemed to get quicker and more dynamic. The balance grew leaner, which was good and the music gained agility. The slightly dark tonality lifted, or was it that I grew more used to it? The bandwidth seemed to grow and grow as the system became more eloquent at the frequency extremes, but the large-scale view remained.

It just got tighter as the sound grew more honed and precise.

Yes, the cabling is tonally rich, very smooth, and notably powerful. Actually you might well need to adjust the position of your speakers if you try it because it asks a lot of them, particularly in the bass. But, if you like to listen to music with a sense of narrative or like the story that a piece can tell then I might suggest that ChordMusic is something you should seriously consider. For me there's daytime listening and then there is still-of-the-night involvement when I find myself wanting to listen to different, perhaps more challenging music. These were the times when I could really appreciate the ChordMusic's fuller potential. It is extremely articulate and the closer you look and listen the more relevance this has. The way a violin, in a great concerto allows the player to speak through the orchestral backdrop can make the hairs on your neck rise. You understand that the soloist is great because of the communication you feel as they use their technique with feeling. Emotionally it should be powerful. It should ▶

“ChordMusic has a natural quality of vocal texture and instrumental timbre that can be beguiling.”

► speak to you and involve you and if your system does this then it's a great system. Not for the hi-fi factor, but because it is telling a story and for the time you are listening to it, you are surely a part of it. Every good story deserves a listener. That kind of system is priceless and it isn't arrived at easily, especially now that audio is moving into a new world of hi-res musical file storage and often into a kind of hyper-realistic sound that can easily lean toward the detached and sterile.

I can't let the opportunity to mention its considerable ability with backing vocals slip either. I have been on a vocal group binge for a while now. On all types of bands from all era ChordMusic is superb with vocal generally, but the way it deals with multi-vocals and their interaction is among the best I have heard. It's the shape and rock-solid stability of the harmonies that is so fascinating to me and the way they weave themselves in and around the music, supporting the main vocal, and adding richness and harmonic polish. ChordMusic has a natural quality of vocal texture and instrumental timbre that can be beguiling. There is no noticeable compression or sense that the music is being squeezed out of the speakers. In short, it is remarkably coherent top to bottom with a notable sense of ease and natural tonality too.

It goes to the heart of home audio. It's not that important to me that I listen to systems with the highest resolution or the most striking soundstage, but it is vital that I feel some sort of connection with it and get some sort of emotional kick-back. Often, the right choice of a cable upgrade can enlighten those things that are personally subjective, along with the kind of musical involvement that might have once seemed just over the horizon and out of reach. I have heard million dollar systems that were impressive in their ability to move air and bristled with sensational detailing but were so emotionally sterile that they just never got me involved. The personal ingredients for a successful system are elusive because they go beyond the superficial and into our lives, our history and what makes us the way we are. There are so many ways in which we enjoy music and it's the meaningfulness of the experience that has kept me interested and coming back for more over all these years. A review can offer a personal view and opinion, but in reality its very limited compared to personal experience.

Your musical journey and tastes are different to mine, but if you're reading this, we probably share a love and even a need for music in our lives and a good audio system is a part of that. ChordMusic is very, very expensive, but so are all high-end cables. Some are priced in the stratosphere. As the means becomes available to improve your musical adventure and the potential for an upgrade looms, I would suggest you try and get a serious listen to the musical intrigue that ChordMusic cabling offers. Personally, I think they are extremely interesting and have raised The Chord Company's profile at this end of the market considerably. +



PRICES AND CONTACTS

Type: Audio cables

Prices

Analogue: 2xRCA–2xRCA 1m £3,800

RCA-Din 1m £3,800

Din-Din 1m £3,500

2xXLR - 2xXLR 1m £5,500

Digital: Digital RCA - RCA (or BNC) 1m
£3,500

Digital Streaming 1m £3,800

Digital XLR - XLR (AES/EBU) 1m
£3,800

Speaker: Speaker cable per metre
(terminated) £1,100
1.5m pair £3,300
5m pair £11,000

Manufacturer: The Chord Company

URL: chord.co.uk

Tel: +44 (0) 1980 625700



The Chord Company

ChordMusic cable system

Reviewed in Issue **166**



“
If you like to listen to music with a sense of narrative or like the story that a piece can tell then I might suggest that ChordMusic is something you should seriously consider.”

The reasoning behind The Chord Company’s flagship cable – ChordMusic – can be summed up in a single sentence: conventional dielectrics are not phase stable at room temperatures. The one exception to this rule – called Taylon by the company – is expensive, proprietary, and until recently, a very hush-hush Deep-State-Black-Helicopters-Official-Secrets-Act-Military-Industrial-Complex kind of material. In essence, ChordMusic is what happens when you take The Chord Company’s top Sarum T cable and add even more Taylon insulation.

In our test of a complete ChordMusic wired system, Chris Thomas felt that, “the cabling is tonally rich, very smooth, and notably powerful. Actually you might well need to adjust the position of your speakers if you try it because it asks a lot of them, particularly in the bass. But, if you like to listen to music with a sense of narrative or like the story that a piece can tell then I might suggest that ChordMusic is something you should seriously consider.” He felt its ability with vocals was especially strong: “On all types of bands from all eras ChordMusic is superb with vocals generally, but the way it deals with multi-vocals and their interaction is among the best I have heard. It’s the shape and rock-solid stability of the harmonies that is so fascinating to me and the way they weave themselves in and around the music, supporting the main vocal, and adding richness and harmonic polish” adding that, “In short, it is remarkably coherent top to bottom with a notable sense of ease and natural tonality too.” +

Chord Signature Reference

Trickle-down tech from Chord's flagship Sarum has birthed a 'Reference' version of its shielded Signature speaker cable. Review & Lab: **Paul Miller**



Hand built to order, Chord's latest Signature speaker cable looks like the original but features improved conductors and dielectrics and is a mite more flexible too! This 'Reference' version is available in 1.5m pre-terminated lengths at £600, increasing to £2000 for the 5m pair reviewed here. Terminations include 24k gold-plated banana plugs and spade connectors and BFA Camcon connectors, while the nylon braid comes in black/black or, as illustrated here, red/black colourways.

Chord claims that its 2005 Signature was the 'first available speaker cable with high frequency effective shielding', but it was certainly not the first shielded speaker cable. My own lab test records show the graphite-screened QED Incon and braid-screened Silver Sounds 12/2 from 1992, both incorporating drain wires terminated at the 'amp end' of the cable.

There have been various screened cables launched in the meantime but all, as far as I can tell, have the signal and return conductors surrounded by a common shield. Chord's Signature, and today's Reference version, are distinctive because each conductor has its own separate screen, electrically isolated from the other. Moreover, because each conductor is effectively a substantial 10-gauge silver-plated coax with a high quality PTFE dielectric (rather than multiple coaxial cables connected in parallel) and the screen appears to be unconnected to



ABOVE: Like the original Chord Signature cable, the new Signature Reference uses shielded, coaxial signal and return conductors

either end of the cable, there's no penalty to its overall capacitance – just 35pF/m according to my measurements. The loose twisted-pair geometry does push the series inductance up a tad, to 0.9µH/m, but the substantial cross-section of those multi-stranded cores keeps the loop resistance down to a fabulously low 5.9mohm/m. The power loss is just 0.0064dB/m.

brightest brass and spot-lit percussion has slightly less 'reach' even though there's no doubting the balance and composure offered by the cable. Complex classical works were easy to interpret, the cable assisting in the delivery of 'difficult' pieces without stress or strain. ⬇

HI-FI NEWS VERDICT

Now in Reference guise, Chord's Signature is a highly developed cable which has evolved to complement similarly civilised systems. It necessarily faces stiff competition at this exalted price level but holds its own with a delivery of power and grace that can make lesser cables appear grainy or uncouth. The combination of low capacitance and resistance also bodes well for its consistent behaviour with a range of different amplifiers.

Sound Quality: 80%



PUNCHY PERFORMER

Thick, low-resistance cables typically retain the impact of the lustiest amplifiers and Chord's Signature Reference is no exception. The fruity kick-drum/bass line of Donald Fagen's *Morph The Cat* [96kHz/24-bit; Warner Music 9362499752] powered from my B&W 802Ds with a punch and purpose that belied the relaxed rhythm of the piece while the multi-tracked vocals sang as clear as day. By comparison, the

LEFT: The gentle twist of each cable's pair of conductors is maintained by an aluminium clamp, fixed 10in from each end

The T Factor

HI-FI WORLD

Chord Company's new Sarum T loudspeaker cables use proprietary insulation to produce a stellar sound, says Jon Myles.

Many things go into making high-performance loudspeaker cables; the conductors used, terminations, quality of connectors, screening and the dielectric all have a significant effect.

Of these, the latter is probably the least well understood – but they play a significant part in the whole equation. In essence their role is to reduce the signal leakage and so aid the accurate flow of information from the amplifier into your loudspeakers.

There are many types in use – from relatively cheap PVC to polyethylene, polypropylene and the more popular PTFE used in many higher grade cables. New variants are rare – so when a company such as Chord Cables with 32 years in the business comes up with one it piques interest.

The material in question is Teflon – which under a different name is used in military applications to secure signal integrity at all operating temperatures. Chord says this dielectric is only available to them and has been implemented across the whole new Sarum T range

– which also includes a digital cable and power lead at the moment.

It first surfaced as a component in the ChordMusic range – where the loudspeaker cables start from £3300. But the Sarum T start from £1800 for a 1.5 metre pair. Other important features are silver-plated oxygen free copper conductors, a heavy braid foil for shielding and a thick outer jacket.

The cables also come in twisted pairs and are hand-built in Chord's own plant in Wiltshire.

SOUND QUALITY

I first heard the new Sarum T range during a visit to their Wiltshire headquarters. Compared to the previous Sarum cables they were impressive.

But with longer listening through my own system the step-change was dramatic in both dynamics and the extra musical information.

Plugging them into both a Naim Supernait 2 integrated amplifier and a Naim Uniti Atom all-in-one streamer/amp showed just how clear and open these cables are.

What was immediately noticeable is how natural they sound. Music flowed effortlessly

and instruments were given room to breathe. It's an effect that works from top to bottom – so big bass tracks like Led Zeppelin's 'When The Levee Breaks' had increased punch and authority, while gentler pieces such as Arvo Pärt's 'Spiegel im Spiegel' were put across with delicious delicacy.

Many cables impart a particular character on the music but the most impressive thing here is the absence of just that. It means the performance comes to the front with no smear or sense of constriction; I forgot I was listening to electronic components and transducers. Everything seemed improved – from timing to instrumental cohesion.

Only the very best 'speaker cables do that and these warrant a place among that elite group.

CONCLUSION

£1800 might seem a lot for a loudspeaker cable but the Sarum Ts justify the price. They are easily as good as some much more expensive rivals, being open, uncoloured and superbly natural – letting you hear the sound of your amplifier and loudspeakers as they should be.



**CHORD SARUM T
£1800 (1.5 METRE
PAIR)**



**OUTSTANDING - amongst
the best.**

VERDICT

Proprietary materials and construction translate into a cable that can bring the best out of any system. Supremely open and unsullied, they can compete with rivals costing many times more.

FOR

- wide bandwidth
- open, natural sound
- tonally accurate

AGAINST

- nothing

The Chord Company
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