The MusicWorks Reflex Ultra G5/8 Distribution Block

More things to do with Acouplex…

by Roy Gregory

The audio industry is a bizarrely segmented and divisive arena. Given that the goal is a single, integrated (and, hopefully, musically coherent) system, the degree of collaboration or even common thinking across that system's various components is minimal to say the least. Even within a single product category, such as amplifiers, we don't just have schisms between Classes A, AB and D, solid-state and tube, the DHT NOS evangelists won't talk to the push-pull pentode brigade, while hybrid amps are simply beyond the pale, upstart opportunists trying to exploit the vacuum tube's inherent superiority for nefarious (and probably self-serving) ends. Don't even get me started on competing speaker technologies… If, when the day of reckoning arrives, the only people who make it into heaven are the ones that own flea-powered triode amps and vintage (preferably single driver) horn speakers, the rest of us are probably well out of it!

But on a more serious note, these divisive tendencies, technological myopia and a reluctance to learn from each other's experience creates a number of serious blind-spots when it comes to product design. When it comes to building hi-fi products, accepted wisdom often falls into the category of 'never questioned'. The result is the ubiquitous application of components or materials that consistently limit performance, because they're fashionable or because it's always been that way.

When 'good practice' turns bad…

You want an example? Try the nasty, raw steel spikes that you find on the bottom of almost every speaker that costs less than €20k. Companies know that customers expect their speakers to have spikes, so they provide them. But because the designer is wrapped up in his 'big thing', be that the driver technology he's using, the cabinet design or materials, the crossover technology or components (or some lopsided combination of all three) the spikes are an

afterthought, bought off the shelf, often for the lowest price possible. Yet those spikes have a direct and demonstrable impact on the speaker's performance – something the manufacturer often remains blissfully ignorant of, because during development they don't listen with the spikes in place and they certainly don't compare different spikes. Which is a problem, because those raw steel spikes they supply not only sound bad, the crude threads they have make precise adjustment of the speaker's attitude needlessly difficult or impossible. So, they undermine potential performance in two ways, sonically and positionally.

Replace those nasty, raw steel items with a set of Track Audio or Andante-Largo, precision machined, stainless-steel spikes and you'll get an instant and obvious improvement, both in the inherent sound of the speaker but also the ease and accuracy with which it can be set-up and, very often its stability, if it's placed on carpet. Given just how demonstrable those improvements are and the fierce competition between sub-€20k speakers, you'd think that fitting decent spikes would be a no-brainer… Designers will generally cite cost as a prohibitive factor, but bought in bulk, the impact on BOM would be tiny. What they really mean is that they don't want to give up any budget that might be applied to their particular components or area of interest – even if using crappy spikes undermines any benefits from their chosen Golden Path. Which brings us right back to square one.

Other, similar blind spots abound, such as the ubiquitous application of bent metal casework, steel fixings, rubber feet on amplifiers and gaudy, over-sized and over-built connectors. All-told, it's a depressing landscape. One that helps explain why so many products genuinely struggle to rise above the realms of mediocrity. Unless, of course, you are the possessor of some new, magic material. A material that seems to deliver consistent sonic benefits when applied to a whole host of audio products. Then? Then it's a case of, how many places and how many ways can I use it?

MusicWork's proprietary Acouplex material seems to be just such a case. Deceptively simple in concept and appearance, it's the result of the Company's exhaustive (exhausting?) evolutionary listening tests, a long, drawn-out process that does, eventually, yield results. And what results! So far, the material has already featured in shelves and a rack, cones footers and other supports. Then there's the innovative and astonishing ReFract damping panels for use with the CH components. In fact, time and imagination seem to be the only limitations when it comes to applying the material. A complete CH component casing? Always possible – but possibly too big a challenge to contemplate. However, the

potential mechanical advantages of the material as a chassis element are too great to be ignored, so it was only a matter of time before a complete Acouplex component emerged.

MusicWorks had already developed an audio-dedicated distribution block, based on an acrylic sandwich construction. Leveraging the advantages of multi-layer contact damping, a non-metallic chassis material and (unlike units based on extruded sections) the ability to employ shapes with non-parallel sides to help control resonant characteristics, the acrylic blocks already delivered an excellent level of performance. Switching to Acouplex construction really was a case of straight substitution, one material for the other, while taking the opportunity to refine the fixings still further, eliminating even more metallic elements. They also took the opportunity to increase the capacity, now offering an eight-way as well as the original six-way block. The result is the rather clumsily named Reflex Ultra G5/8 Distribution Block – although its musical attributes and performance are anything but clumsy!

Details, details…

Even a quick glance will give you the basic layout and features of the MusicWorks block(s). The 'two-by…' layout creates a broad, flat footprint, not as easy to site behind a rack as a linear strip, but that's missing the point. The MusicWorks block is both laterally stable and perfectly proportioned to sit on a rack shelf – or the Acouplex 'sub-table' that MusicWorks offers. Rack placement is a whole lot more practical with the right-angle entry of UK 13A mains plugs (rather than Schuko or US straight entry designs) but the stability is extremely welcome and makes dressing power cords far easier, an important point for those who like to keep all power cords the same length. But whatever the Reflex block sits on, make sure it's stable, with all four feet equally weighted.

The hourglass profile is immediately obvious, which together with the curved ends helps eliminate constant chord dimensions and spreads the unit's resonant signature. The body of the block is constructed from five layers of Acouplex (an Acrylic/Peek composite, for those who haven't been paying attention) a thicker, 19mm slab sandwiched between a pair of 10mm plates on each side, clamped in the corners with non-metallic fixings constructed from Acouplex and PEEK parts. These fixings are likely to change from the conical studs you'll see in the pictures of the prototype unit, introducing a tool tightened solution to meet legal requirements. Aesthetically I'm all in favour of that! But the corner clamping elements

do underline just how far MusicWorks are prepared to go to eliminate metallic components from their distribution block. In fact, metal is limited to the cryo-treated conductive elements (wiring and contacts). Even the screws holding the sockets in place are machined from PEEK engineering polymer!

With six or eight sockets on the top-plate, the only other significant feature is the 20A IEC input installed in one end. It's also possible to specify an external ground terminal connected to the star ground point of the internal wiring harness. A neat, 4mm banana socket, if I was MusicWorks I'd be making that option a standard feature, if only to streamline production and bring the Reflex Ultra blocks into line with standard practice. Of course, if you've got a spare socket, you can use that to connect an earth wire via the appropriate AC plug, but modern systems seem to be more and more demanding when it comes to AC connections, so an independent ground socket makes sense, as does its connection directly to the central star.

Beyond that and the price, there's not a lot to say on the physical side. There're no active elements, filtering or electrical isolation built into the Reflex Ultra. This is a straightforward, star-grounded, ultra-low impedance distribution block, in the same style as Nordost's long-standing and well-regarded QB8. It exists to provide as direct an AC feed and as effective an electrical ground as possible, without interference from intervening elements. But it also has something else in common with the QB8: it is designed to minimise the often-overlooked influence of mains-born mechanical vibration on the system's AC supply and thus the system itself. A six-way block will cost you £3,600, with an eight-way weighing in at £4,750, both prices including 20% UK sales tax – not cheap, but hardly premium prices in today's power distribution market place. It's currently available with either UK 13A or Schuko outlets, although the possibilities for a US version are being considered: it's possible, but a socket needs to be selected and any mechanical adaptation carried out, if necessary.

Now plug the Reflex Ultra in – and plug your system into it – and be prepared for a shock. AC vibration may not be top of mind, but it's audibly front and centre when it comes to musical reproduction.

When it comes to connections, there's a clear set of preferences, according to MusicWorks. Starting at the input end and on the right, connect products in order of power demand, highest first. Second socket is front-row left, then second-row right and so on. That would mean the power amp goes first-row right: a second power amp would go first row left. If you are only using one power amp but have a pre-amp or other power supply, that would occupy the first row left slot. After the pre-amp or line-stage, connect sources in order of priority or power demand, following the same right/left steps. That certainly accords with my previous experience with both Nordost and Chord blocks and proved to work in practice.

I listened to the Acouplex mains block in a number of different systems and situations, but it's (considerable) contribution was remarkably consistent, meaning that I can rely on a single set of comparative listening results. The system used consisted of a CH Precision D1.5, C1.2, X1, T1 four-box CD/SACD player, feeding the Levinson 585 integrated amp. Speakers were the Vienna Acoustics Haydn Signatures or the Peak Consult Sinfonias, wheeled in to deliver extra bandwidth and more bottom-end information. As it happened, that proved to be an unnecessary step, the small VA speakers proving perfectly capable of revealing the impact of the Reflex Ultra distribution block: or perhaps that should be the other way round, the benefits of the block being just as apparent on the smaller speakers. Cables used for the exercise were a complete set of Nordost V2 (power, signal and speaker). MusicWorks also offer their own power cords, but in this instance, I wanted to assess the Acouplex block in a wider system context. I also ran it with Chord Music and CFM cables and, once again, its musical signature proved remarkably consistent.

And - relax...

That character is fulsome, natural and fluid, full of warmth, body and a grounded sense of rhythm in the music. It matters not what you play, that coherent sense of musical flow and expression is immediately apparent, the way high and low frequencies seem to fall into balance, the top to bottom consistency of harmonic envelope and musical energy. It just makes accessible sense of proceedings. This ability to both pull recordings together and open them out worked across genre and scale, from near-solo instrumental pieces (the sense of space and the solid instrumental presence on Rachel Podger's *The Muses Restor'd* – Channel Classics CCS46324) to small ensemble works (the tight musical relationship and sense of driven musical purpose on Isabelle Faust's *Locatelli – il virtuoso, il poeta* – Harmonia Mundi HMM 902398), from the intimate vocals of Aimee Mann's *Lost In Space* (MoFi UDSACD 2021) to the sheer scale, shifting densities and towering dynamics of the *Thin Red Line OST* (RCA 09026-63382-2). It positively invites the sort of trawl through the outer reaches of your musical collection more often associated with streaming. While I reached for the familiar and well-known in order to exercise my critical responsibilities, I still found those discs leading to unusual and interesting places…

Reaching for piano and orchestra, I selected (perhaps unsurprisingly to regular readers) the Beethoven concertos: but not my 'go to' Benedetti Michelangeli 1st which is always such an acid test of a system's musical coherence and communication, flow and purpose. Instead, I found myself placing the Krystian Zimerman *Emperor* (with Rattle and the LSO – DGG 483 9971) in the player's tray. This has always been an interesting but frustrating recording, made during Covid, the 'socially distanced' orchestra going some way to dissipating Rattle's often heavy-handed approach, but ultimately lacking the concentrated sense of purpose and cohesion demanded by Zimerman's poised, quicksilver playing, with its sure-footed temporal integrity but light touch. Revisiting the performance, using the Nordost QB8/III, I heard all of those familiar musical and presentational characteristics, arguably laid bare by the QB8's combination of graduated dynamics, clarity and immediacy.

So, switching to the Reflex Ultra block, I was expecting increased body and presence, but I wasn't ready for the switch-up in terms of spatial coherence,

temporal integrity and musical flow. The Reflex Ultra revealed the extended depth in the orchestral stage, the almost square layout. Yet it did so without making the elements of the orchestra disjointed or detached. The sense of a single, overarching acoustic helped bind the orchestral playing into a single, purposeful whole, instilling exactly the coherent quality I'd always felt was lacking. Zimerman's playing gained grace, poise and fluidity, his fingers dancing across the keys, his lines precise, delicate and beautifully proportioned, where the Nordost block had made more of the spaces between notes and phrases, creating a more mechanical effect. But underpinning the whole presentation was its sense of top-to-bottom continuity and balance. Just listen to the second movement and the way in which the pianist's subtle left-hand shapings support and echo the bolder, poised clarity and precision of the right, separate but never separated. The sparse, instrumental murmurings of the orchestra are just as well balanced and placed, in terms of weight and timing. There's an unambiguous spatial clarity to the unusual proportions of the stage, again a result of the even way in which the system is handling musical energy across its entire range.

Has the Reflex Ultra revealed the true nature of the recording? I don't think so. But its inherent coherence and natural harmonics are making more sense of what is there. The Nordost block delivers greater clarity, detail and immediacy. Its dynamic discrimination is more explicit (ever a Nordost trait) arguably leaning more to the leading edge of notes – something the significantly more expensive QB10 corrects. The Acouplex block is centring the energy and weight of notes more accurately and ultimately, presenting them (and the notes around them) more naturally. This enhanced sense of pattern is what binds the disparate elements in the Zimerman recording more closely together. It doesn't transform the content. It just makes more sense of it. I'll still take the ABM recording over this one – which also sounds wonderfully alive and present on the Reflex Ultra – but the Acouplex block makes the Zimerman disc a far more worthwhile (and less frustrating) listen, allowing me to really enjoy his characteristically clean and fluid playing, supported rather than intruded upon by the orchestral accompaniment.

This sense of the natural procession of events, over the sonic artefacts fastened on by so many systems (and listeners) becomes more apparent, the more personally familiar the material. Voices, orchestras and/or venues you actually know are simply more recognisable, the leap required by the ears and brain to accept and place what you are hearing that much shorter and easier. But whether the music and artist are familiar or not, whether it's Eleanor McEvoy

or the LPO recorded at the RFH, the easy, unforced musicality of the Reflex Ultra, the way it brings a system together, making more sense of the recording being played, makes for a more inviting and more relaxed listening experience. As unimpressive as that might seem (at least on paper), it's actually arguably the block's biggest contribution to your musical enjoyment. You don't just enjoy your music more, you'll find yourself enjoying it for longer too.

Is the Reflex Ultra the perfect AC distribution solution? Both the Telos Power Station and the Nordost QB10 are quieter and offer higher levels of resolution. The Telos in particular, mirrors the lucid, fluid presentation that makes the Acouplex block so enjoyable, while the QB10 offers greater dynamic range, discrimination and immediacy. But both of these units cost significantly more than the MusicWorks block: between five and ten times the price!

The Acouplex block is more musically expressive and engaging than other blocks at or near its price – and while I won't bore you with the details, I did do direct comparisons to four other 'audiophile' offerings. Indeed, at €2,650/£2,300, available as an 8-way Eu/US or 6-way UK block, the QB8/III is by far the best and most cost-effective of the rest. The Reflex Ultra might cost more, but the sense of musical coherence, insight and performance it brings to proceedings is well worth the difference. Which begs the question, should you swap out a QB8 (or lesser block) for the Reflex Ultra? Even if you've got the latest QB8/III, I'd say you'll gain a significant musical upgrade if you do replace it with the Acouplex block. The problem is, that ain't always possible. Space, practicality or funds might all get in the way of taking that step. So, do you simply accept second best? There are some things you can do and Acouplex can still help. A while ago, I wrote about the Plug Schus (https://gy8.eu/review/schus/) small Acouplex damping discs that fit over the pins of a Schuko connector (they're available for UK 13A plugs too – dubbed Sox). How close, I wondered, would using Schus bring the QB8 to the performance of the Reflex Ultra?

Soft Schu shuffle...

Simply adding Schus to the leads sprouting from the QB8 brings a really worthwhile increase in the sense of musical presence and body, but also temporal coherence. Playing Jennifer Pike's Sibelius *Violin Concerto* (with Davis and the Bergen P.O. – Chandos CHSA 5134) there's a greater sense of tension in the opening passage, a more fluid, organic feel and shape to the bowing, a more emphatic sense of musical direction and purpose. That first, explosive orchestral exclamation mark gains texture and a layered complexity reflecting the range of instruments involved, while bass transparency and the separation

of double bass and timp rolls is significantly improved. Add some Acouplex cones underneath and you'll reap further benefits in terms of spatial definition, transparency and dimensionality, adding further to the musicality of the whole. Impressive stuff given the costs involved (Schus weigh in at £50 each, cones at £100, both including sales tax). It doesn't turn a QB8 into a Reflex ultra, but it certainly brings some of those qualities to the system.

However, swapping back to the Acouplex block simply delivers more of the same, along with its signature, lucid and relaxed presentation. Schus in the Reflex Ultra made a difference, but it wasn't compelling, but putting a Schu between the power cord feeding the Acouplex block and the wall most definitely was. All in all, it's a sequence of comparisons that simply serves to underline just how effectively Acouplex acts on the overall coherence, musicality and listenability of a system – so far, any system with which I've used it. So, it comes as no real surprise that the MusicWorks Reflex Ultra sets the standard for (remotely affordable) AC distribution blocks: but even if it's out of reach, don't overlook the Plug Schus or Sox. Added to an existing block, with or without isolation cones/pucks, the results are still remarkable – if not in the same league as the Reflex Ultra. Starting from scratch or added to an existing set-up, the MusicWorks block is a solid basis on which to build, cutting straight to the musical heart of any recording and allowing your system to deliver its best (and the best) possible performance.

Meanwhile, Acouplex (the material) continues to intrigue and impress. From the plug Schu to the ReFract panel (and everything else in between), the weird but wonderful products that result do what few other things can. In many respects the Reflex Ultra distribution block is both one of the most effective and least surprising of those successful applications. If you haven't tried Acouplex in your system yet, this is probably the best place to start, a one hit wonder that covers all the bases and benefits. But be warned, cold turkey ain't nice!

MusicWorks
The AudioWorks Ltd
14 Stockport Road
Cheadle, Cheshire, SK8 2AA, UK
+44 (0)161 428 7887
www.theaudioworks.co.uk
www.musicworks-hifi.com

Prices and availability

MusicWorks Reflex Ultra Distribution Block	
G5/8 Eight-way	£4,750
G5/6 Six-way	£3,600
Acouplex Plug Schus (Schuko)	£50 ea.
Acouplex Plug Sox (UK 13A)	£60 ea.

(All prices include 20% UK sales tax)