The KLEI Purity AC mains cable

Seldom does a single product, let alone a 1 metre long power cable make you ask fundamental questions about what you do and why.

While I intentionally limit my writing to talking about a specific product or model that I'd like to think of is interest to you, we are all affected by what happens in the wider world and this will inevitably feed in to how we look at our choices.

I'll admit to having a strong aversion to the metastatic capitalism that is consuming the world. Money and shallow celebrity dominate, inequality is taken to extremes and short term, self-centred thinking trumps the greater good and environment.

Yet here I am, about to make the case for a NZ\$1800 power cable that I know full well, most people would never consider, let alone afford. Can you start to see the dilemma?

So, let's take this back a step or two and get back on topic – Totally Wired has always been about finding better ways to enjoy your music – everyone has different tastes and circumstances so a one-size-fits-all approach is never going to work. But because you are reading this I can make some reasonable assumptions. You're literate, you're at the very least curious as to how you make your system sound better in a cost effective manner. I don't know what type of music might spin your particular wheels but I do know what I can hear and from the feedback I get from clients it's obvious that this is consistent with what you are going to hear.



The original KLEI™gPower2 AC cable above and the new KLEI™zPurity8 AC (in black) below.

We've already dealt with the inevitable, 'how can a mains cable possibly work?' questions in our <u>review of the KLEI gPower2 AC cable</u> introduced in 2016 – this is very much your starting point for understanding the whys and wherefores of power cables. The KLEI™gPower2 AC laid all the groundwork for this new cable but it was very much engineered to be as affordable as it could be and yet still sound convincingly better than both standard free cables and other competing designs. This cable has always been sold on the basis that if you aren't completely happy with it, we'll take it back and refund you. But over 90% of the unexpectedly large number we have sold have stayed with their owners and many have come back for more. They work in a positive and tangible way.

I also greatly valued the comments I got from the few people that did return their cables. It is clear that there can be unexpected interactions, that the large plugs can present physical issues, that other cables may be better suited in some systems and most importantly, that they were looking for a more obvious and greater improvement.

The KLEI Purity AC cable has been designed, in part, to address some of these issues. But from inception, Keith was always working towards the very best sounding AC cable he could design and build – it is made to this standard, not to a cost.

But cost and performance combine to give us value and so the former is important. The price premium over the KLEI gPower2 is directly attributable to better materials and the increased complexity of the design. But none of this is obvious from the outside.



These plugs are made exclusively for KLEI and if you look closely you'll see different

platings on the conductors.

This cable is not audio bling or a status symbol – it really doesn't look that different from a standard cable with a chunky NZ plug at the wall end and a IEC socket that fits most components at the other end. It's black so no-one will walk it to your house and make comment. I've asked Keith directly to explain the physical differences between the gPower2 and new Purity AC cable and I've got to say I really would have liked more –

'The zP8 AC uses an even more advanced ZeroFlowPlusGroundState ™ cable architecture and different plugs.' The link takes you through to the KLEI site page.

I've got to the point of connecting any and all components I listen to with the KLEI™gPower2 AC power cable. I'm confident I can hear more of every components inner attributes with it and as the various cables have burnt in and settled down, the system seems more happily balanced. So the baseline we're working from is not the standard mains cable but something that we'd already regard as optimal.

Within this setting I've chosen to use an integrated amplifier to evaluate the new mains cable, the NuPrime IDA-16, which isn't particularly costly but is very well proven and being a single chassis with DAC, preamp and power amplifier, allows us to listen to the new KLEI^mzPurity8 AC power cable in isolation. Just the one cable is required.

On the speaker end we've been jumping between our Sonus faber Auditor Ms (a small stand mounted Italian speaker) and the new floor standing <u>Monitor Audio Gold 200s</u> which give further extension to both bass and treble. Sources are the little <u>Questyle QP1-R</u> player for digital and an analogue concoction of Well Tempered, Dynavector and Pure Audio.

Like all the KLEI cables, there is both a burn in and a settling period. The former is from new. The Purity level AC cables are partially burnt in before shipping but you'll find in your own system the sound develops over a surprisingly long period of time. While my initial impression of the Purity AC was that it was convincingly better than the well run in gPower2 it replaced, over the weeks that I've listened, the progression of improvements is much greater than that initial advantage – the sound is now much more detailed yet relaxed. After about 2 weeks the bass suddenly extended and became more powerful.

The album Sines by NZ band Jakob is one of my favourites – live they are ferocious but the studio album is a much more layered and sophisticated take. I've played it many times so I thought I knew it inside out – great care has been taken in the production and yet it still retains the power that this band can generate on stage. You can hear right into the recording – the double vinyl version is a bit of an analogue treasure but you can also get a lossless download here at Bandcamp, which can be just as rewarding.

I've used this album as an example to illustrate what this new KLEI™zPurity8 AC power cable can do for you. While previous system upgrades made Sines sound better, the addition of the KLEI™zPurity8 AC made more obvious improvements. This is a recording that can growl – it's dark and deep. Yet through this heaviness, the individual guitar notes, string by string, chord by chord are clearly presented. The highly original drum patterns become much more organic and textured with a real sense of stick hitting skin.

On the first track on side B – Magna Carta – the guitar comes in and is absolutely filthy. It's a dark heavily distorted sound that I associate tubed Marshall amplifiers being driven to the limit. In contrast, the tracks that bracket it – Emergent and Harmonia have string arrangements that, in isolation, could find a place in any classical performance. It's the contrast and layers that make up the texture and with the KLEI™zPurity8 AC power cable I felt I was hearing this all anew.

While not a great classical listener, the cello has always been an instrument I've liked – if anything it is often in the scores of films I enjoy. For the first time I realise that the tonality of the electric guitar on this album is remarkably close to that of the cello. And it's probably no coincidence that Sonus faber model both the physical speaker and the sound they produce on instruments such as this. The more I listen, the more associations I am able to make.

For many listeners there is a real interplay between film sound tracks and musical choices. A sound track is very much the aural landscape in film and part of the cinematic experience that takes us beyond just sitting in front of the TV. The effect of the mains cable on the amplifier could be described as making it more cinematic – it's a broader sweep of sound, a bigger screen and the shared experience of being in a theatre rather than a living room.

In my listening notes I keep coming back to the idea of texture. To see a painting as a print or on a screen is never the same as being in the same room – paintings in the flesh are always richer in tone, the individual brush stokes more obvious, the layering of oils provide perspective and depth – the reflection of light that texture behaves in a way that defies reproduction in flat form.

With Carolijn's return to university and in depth study of art history I'm seeing parallels between how this knowledge allows greater appreciation of the visual and the way better hifi systems work; the more information you are presented with and understand, the more you can get out of a work of art or a recording. And for many people, a piece of music can be as much an artwork as a painting – it transmits ideas, emotion and transcends the time of its inception.

There is nothing elitist about this idea – enjoying music should not be limited by genre. And when we can dramatically improve the sound in digital systems simply by choosing a more data rich format at no extra cost other than a bit of storage space, you can see my description of what the KLEI™zPurity8 AC power cables does is part of a continuum. But this effect is both real and a valid option for those wanting to further improve an already good system.

This cable takes us closer to the live experiences that we want to recreate – for me it could be with 30 people in a cold attic in the Dunedin midwinter, or over 1000 in the thrall of Nick Cave. It's the same with studio productions – the musicians are giving you their thoughts and inspirations, all wrapped up in the best packing they can get. The more of this you can unwind, the more you'll understand and appreciate.

In listening, the extra clarity afforded by the mains cable made the differences between the analogue and digital sources more obvious – I'm still not so sure that this confers superiority on either format given the huge disparity in costs between the two sources but I gain two distinct impressions.

With analogue, the qualities that I associate with the best tube products were painted across the sound of the IDA-16 (which is very much solid state and carries 5 digital inputs to one analogue). The midrange richness of PrimaLuna and Audio Research was dragged out of my tonal memory. There is an ease and flow I've not heard before with the NuPrime.

The PrimaLuna seems to me to intentionally layer tube artefacts on to sound (admittedly in a pleasing way) which gives an almost 'dirty' sound. So is able to make digital sound like analogue in people's minds. Yet when it really is there in a recording, the cable allows an amp to reveal it in what I'm hearing as a more honest and real way.

On digital it is more about insight. Recordings that seemed a little flat or one dimensional before become more detailed and informative – lyrics become much clearer with the voice giving us a full narrative rather than just picking up scraps of a songs meaning. Whole lines of instrumental passages become distinct.

With both formats it was striking how the last notes and passages on many tracks decayed away – although it depends very much on what is actually there, the fade to nothingness was often extended and while intentional or not you can hear the sounds of people and instruments for seconds into what you would have previously thought was simply an empty space between tracks.

In trying to quantify what the new KLEI™zPurity8 AC power cable does I've gone back to many recently played albums and often rather than sitting down in front of the speakers, have been doing other things – preparing dinner, reading or just staring blankly out the window. At these times I've been struck by how the sound is now carrying through the house in a way that we've not had before. This was the powerful first impression that Shahinian speakers made on me – the ability not just to precisely project into a small listening area, but to fill volumes with a sound that carries without having to be at high volume.

The real measure of the performance gain made by the KLEI™zPurity8 AC power cable has to be a direct comparison with the similarly priced option of upgrading the physical components. With the original <u>Eichmann power cable</u> this equated to the difference between the 200 and 350 watt power amplifiers. Proving that quality will win over quantity, the 200 with the power cable sounded better than the 350 without. And together cost appreciably less. Likewise the \$500 KLEI™gPower2 AC elevates the performance of amplifiers such as the <u>NuPrime IDA-8</u> and Quad Vena to above that of most \$2-3000 options. Can we make the same comparison with the new and much more costly cable?

The addition of the KLEI™zPurity8 AC power cable elevates the performance of the NuPrime IDA-16 (NZ\$3350) to a level above that of the <u>DAC-10</u> and <u>ST-10</u> separates (\$NZ\$5000). More tellingly it does this even when the better NuPrime models are optimally connected with both KLEI™gPower2 AC power cables and <u>gZero10 Interconnects</u>. We're simply hearing detail and fidelity we have not heard before in any setting. So it's clear that as a value for money case, this single power cable is directly comparable to, and often better than changing components.

Of course given we know that on a level playing field the DAC-10/ST-10 combination is superior to the integrated amplifier, then with the KLEI™zPurity8 AC power cable it's fair assumption that this difference will be magnified.

So in which settings is it most likely that you'll gain the greatest benefit from the KLEI Purity AC? For anyone with a quality integrated amplifier, especially one of the new breed with high resolution DACs built in, the single cable should prove revelatory, and outside of speaker cables, would be all that is required to achieve a seriously good result.

In the context of 'system separates' with control and power amplifiers, it will be first a case at looking at the balance you have made between the two. While I've come to the conclusion that it's the preamp that will yield the greatest benefit as it's here that the quality will shine through, you may well have a system where the power amplifier is very much at the heart and in this case, it would be your starting point. The more components you have in a system, the more variability there will be, so while I can give you my best advice, it's is still worthwhile to experiment with different combinations.

So far, we've just considered the cable as being partnered with the component it is plugged into. But I've formed the view that this cable – and the entry level model – both affect the sound of associated components. When first listening in the shop last year I was struck how systems that didn't yet have a cable in, nevertheless were sounding perceptively better when other systems did have them. AC power is not a continual flow of electrons through a pipe – it's an oscillating wave flicking violently 50 times every second – anyone who has had a decent electric shock can tell you how nasty it can be.

The KLEI mains cables are doing something to tame this – not just for the component that is directly attached but also for everything on the same circuit and maybe beyond. So I'm thinking that for most systems, it's not a game-breaker that other components aren't actually on the mains cable.

But it is also the experience of our clients that with several of the gPower2 cables, each addition reveals more. The question might then become (in systems with several components) is one very good cable the answer or are you better with several of the entry level models at the same end cost?

Listening is telling me that no matter what permutation we try, the KLEI™zPurity8 AC power cable is the most revealing and sounds best. There are simply things it does that can't be replicated with multiple lower cost cables, even with their cumulative effect. That doesn't negate their value, and a single KLEI™zPurity8 AC power cable in a system will allow you to hear even more of the benefits of any other cable upgrades. It really just becomes a question of how far you want to go and right now I'm not seeing any form of ceiling.

While there has been tremendous development of amplifiers with novel designs – NuPrime as an obvious example but also Questyle, the evolution of the NZ made products culminating in Pure Audio and refinement of existing designs (Class AB amplifiers, tubes), the focus is very much on the circuity that music flows through. The manipulation of the incoming power is still about converting it from AC to DC rather than taking it back another step as KLEI do.

Why don't amplifier designers simply reverse engineer a high performance mains cable and incorporate this within the amplifier as there is no argument that they don't work?

The end cost is an obvious issue. An extra \$100 at the manufacturing end becomes quickly magnified and as much as I hate to say it, many products are sold on features and price before real performance. The same applies to simply including a quality cable with the product, I also think that a critical part of what cables do is related to length and it may well not be possible to accommodate this within the case of an existing design. But the most compelling point is that the KLEI cables appear to work their magic with a broad range of components – you can improve what you have now, but also know that anything else you may buy in the future is likely to be similarly improved.

I'll no longer look at the performance of any component simply on the end of the give-away mains cable – I know now that in order to hear what any amplifier, DAC or other component is really capable of, and to fairly evaluate them, the connection of the entry level KLEI™gPower2 AC power cable is the default and the KLEI™zPurity8 AC power cable is the ideal.

Another obvious question is how these cables relate in performance to the various power conditioning plug boards are devices out there? To date I've been unconvinced by all the power boards and supplies I've tried − if there is any improvement it's been very subtle and often I get the feeling we may even be taking a step backwards. In comparison, the improvements we've found with all of Keith's power cables, from the first big blue one, the KLEI™gPower2 AC power cable introduced last year, and now the KLEI™zPurity8 AC power cable, range from convincing to vast.

A good quality distribution board is still worthwhile as they offer a degree of protection and often can filter some interference and reduce the interaction of components on the same circuit. None of this seems to reduce the efficacy of any of the mains cables we have tried.

It bears repeating that these cables have all been developed in 240v settings – most power products are from the US and are inevitably 120v – which means half the voltage and twice the current. Differences of this magnitude must have an effect on any design and even if unintended, it a real advantage to us to have products developed specifically for our conditions.

If you have followed us this far, the real question is what will this cable do for you and is it the best option you can look at? There can be no substitute for hearing this yourself and of all the possible component changes you could look at, simply plugging in a single mains cable is by far the easiest and lowest risk. Quite simply, if it doesn't work for you in the way I've described, send it back for a refund.

The assumption will be that you already have a reasonably well sorted system and that any component changes are likely to be as, or more costly, or maybe just not practical. In many cases you'll have built a system over time and the interplay of the components deliver a particular sound that you are both familiar with and enjoy – everything I hear suggests this cable will give you more of what you like, with no downside. Often changing components can improve some aspects but also throw others out of balance.



Our best cables – the KLEI™zPurity speakers cables, interconnects and AC power cable.

The <u>KLEI Purity range</u> also includes 3 interconnects and speaker cables which we have out with a good number of clients and in stock – so we can compare the benefits of the mains cable with these when trying to quantify the value. While all of these are complementary to each other and enable every increasing levels of transparency and fidelity, it's my impression that the KLEI™zPurity8 AC power cable is comparable with the quantum of improvement made of the signal cables and the qualitative improvement – while being more about the overall feel and tone rather than specific details is also consistent but more likely to vary with components.

To put it another way – while a signal cable reveals more by better transmission and rejection of outside noise, the AC cable works by allowing components to do the same thing because it transforms the environment in which the music is processed and amplified. You hear, not the cable directly, but the component finally able to perform at its best. But the end result in either case is compelling.

Just as I recommended that the KLEI™gPower2 AC be the first KLEI cable people try rather than interconnect or speaker cable, the same applies to the KLEI™zPurity8 AC power cable if you are working at a higher level. In both cases the AC cable not only is one of the more affordable options when compared to the rest of the range – it also sets the stage for further improvements by dealing with what is often the weakest link first. This not only makes your system sound better – the improved transparency means you'll be better able to appreciate any subsequent upgrades. The oft quote 'law of diminishing returns' is turned on its head in this case.

You're only going to find out how compelling by listening and as I've said, we'll make it as easy and risk free as possible for you to do this.



Other KLEI Cable... The Purity Range, Interconnects, Speaker Cables, gPower2 AC cable

Client Feedback

I can't resist a brief comment on the purity AC cable since a quick listen for a few hours, and a straight swapping between power cables, shows an undoubted improvement in the overall result. I'm inclined to doubt whether the difference (as yet — a way to go) is greater than the purity 888 interconnect which was immediately stunning, and the purity speaker cables sustained earlier advances all the way through the system, transforming the whole result, but I certainly think the affect is greater than the gPower2 model. That was an amazing leap for systems, but I agree that this one may outshine that, although perhaps in differently qualitative ways that are less easy to pinpoint.

I wonder if the enhancements are more subtly absorbing in all respects: I'm convinced that upper register tones are less bright, and therefore richer, combining purity with complexity (in piano as well as strings), that lower registers are more present and show through in greater detail (I'm hearing the overtones of a bass clarinet with greater clarity), but I'm also sensing something more allembracing, an overall balancing of presence and dynamics with sheer quality of sound that promises to be incredibly seductive. I thought there had been overall integration of the soundscape before, but this is already better, with internal parts and secondary instruments present in greater clarity but without upsetting any musical balance. I started the last movement of Mahler's 6th Symphony in order to compare the opening passage with different cables (there's a lot of tonal variation in a short space), but with

the new cable I kept going for the whole 30+ minutes, absorbed by the sense of control, balance, and detail. These features were there before, but something seems to be happening to take naturalness and quality several steps further in ways that are not overtly demonstrative.

I did try the cable with different components and while the power amp gave a pretty good result, I've plumped, as you predicted, for the pre-amp. If I ever added a second one, it would be with the power amp. This is different from the zPurity ICs which seemed clearly best, for me, between source (Cambridge) and pre-amp. At \$1800 this cable is commensurate in price to adding the Cambridge CXU: at the moment I'd say it certainly adds an equivalent value, and with more burn in, as you propose, may provide even more — now that would be an impossible choice!

As always, feel free to use any of my comments in any context that's helpful, and edit at will.

You'll be pleased to know that the new purity AC cable works its magic equally well with the Quad Vena. It's not of course an "equal" result to my system, but immediately obvious nonetheless, and noticeable even by a visitor with no claimed listening expertise — clarity of detail, increased bass presence (and controlled bass, even modifying some of the earlier boom effect), overall increase in tone quality (enhancing overtones clearly). I presume this shows that it will give good results even with entry level systems, though whether someone would spend \$1800 rather than upgrade their speakers, say, would be a moot point.

I've just spent two delightful hours listening to a couple of Sibelius Symphonies where the new zPurity AC cable has been doing sterling work with a high definition blue ray disc. After a week (about 25-30 hours), what I first noticed from the cable is being well consolidated, though not hugely changed in its features. So for me the key qualities, as from the outset, are purity (the name is very apt), tonal richness and balance. The gPower2 cable enhanced sound qualities quite brilliantly, particularly in the bass register, but the zPurity8 model advances that impact with subtlety and finesse. I doubt that any more notes or details are being heard (I went back to the gPower2 for a short while to get another comparison), or that any more intensity of effect is being generated, but there is undoubtedly a noticeable improvement in the sheer quality of sound, in all frequencies. I presume this means more overtones in instruments are being revealed, enhancing their timbre and presence, as well as pinpointing their physical location in the soundstage with greater clarity, and the music is somehow being released in a more relaxed, warm and natural manner. These are possibly subtle effects, but they contribute to the ongoing contribution of all the KLEI zPurity cables. There is brightness, but not bright as in vivid, rather bright as in seeing (hearing) all hues, and that kind of brightness allows a richness and balance of instruments to emerge more fully. I don't hear, for instance, any more from the bottom end than with the gPower2, but there is greater clarity of tone, timbre and presence (or what I like to call weight). These features are apparent in the middle and top end as well, making the overall improvement in quality, and clarity of spacing (for larger groups), increasingly clear and very seductive. On my first listening there seemed to be something happening that was advancing naturalness and richness in ways that weren't obviously demonstrative; now I'm even more convinced that this cable is adding an overall hue (or rather releasing qualities from the original source) that adds significantly to the amazing advances made by KLEI's other zPurity cables.

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