

# KLEI gZero ICs by John Ransley (Totally Wired)

Making your music sound much better – the innovative new audio cables and plugs from Keith Louis Eichmann.

Connecting cables are a vital part of every audio system. Yet the actual contribution they make to the sound you enjoy can be easily underestimated – it's easy to just look at the major components in a system and see these as being the most important. There is no doubt that almost every audio designer will try to produce the best sounding components they can at any given price – if for no other reason that it's a highly competitive market out there. The radical improvements made in both the sound, and value of digital products over the last few years demonstrates an almost Darwinian scenario with intense pressure leading to rapid evolution.

The new cables and plugs from KL (which is how he prefers to be known these days) are very much a product of evolution. But what is really important to understand is this evolution has been focused and intense. The accumulation of many refinements, improvements and serious science together combine to produce complete cables which are genuinely innovative.

In short, you can listen to any model in the range and you'll find it far better than any existing cable you presently use.



The full name of his new company is **Keith Louis Eichmann Innovations – KLEI** from here on in.

We know from our own experience that the new KLEI cables easily better the finest cables we have previously listened to and sold. That they do it at a completely fair and affordable prices makes the choice very, very simple.

The original Bullet Plug was KL's first product and easily the most successful – a rethink of the ubiquitous RCA or Phono plug used in just about every audio system. Millions have been made and fitted to cables worldwide. In New Zealand, the Bullet Plug was a major contributor to the success of SlinkyLinks.

The Bullet Plug was a wonderful and deceptively simple product but that doesn't mean it can't be improved upon. KL has spent the last 15 years working on this and the result is a range of 4 new plugs – all share a similar design with the real variation being in material used in the conductors, which are designed in accordance with KL's Signal/Ground Formula.

Did you know that there are really big differences in conductivity in metals commonly used in connecting plugs? This is hugely important as any sound in an audio system comes from the movement of electrons – that's what electricity is – and anything that gets in the way is bad news.

Pure Copper is regarded as being the standard for conductivity and has an arbitrary 100% value. And all that gold you see on audio plugs and sockets? – 65-75% – see a problem? The brass that hides underneath the gold plate almost all other plugs is at best 28%. By way of comparison, Silver alloys can range from 92% to higher than 105% – it's a better conductor than even the highest purity Copper alloy. Of course this isn't news to anyone with SlinkyLinks Kimber AG or Select series.

The new KLEI Harmony Plugs are a story in themselves and the all the new KLEI gZero ICs feature the KLEI Harmony Plugs. The next part of your education in cable design is to understand that the actual signal flow through a cable is subject to many influences – KL's really big contribution to cable design was actually not the Bullet Plug – it was the purposeful and calculated difference between the signal and return conductors that results in better signal flow. Hence the *Eichmann Ratio*.

# KLEI gZero ICs by John Ransley (Totally Wired)

Then there is the optimisation of grounding architecture, mass of metals and dielectrics (insulation), skin effects, structural integrity so the cables will last, dealing with Reactive, RF and EMF effects. And as we have previously pointed out, the differences in conductivity.

Cable design can attract some astonishingly smart people. I've met Ray Kimber and have the greatest respect for his intelligence and products. The guys behind SlinkyLinks came up with some inspired solutions out of left field that really worked. And although I've only ever communicated with KL via e mail and phone, I've followed his work for 15 years and never failed to be impressed by the quality and value of everything we have tried.

What KL has produced with his new cables goes a long way past smart – this is genuine innovation that delivers a radical performance improvement that absolutely anyone can appreciate in even the most modest system. And the better you think your system is now, the greater the improvement you are going to hear with these cables. There is not one single audio component I know of that is going to provide as much benefit as a 1m pair of KLEI gZero2 ICs.

## **What will you hear?**

The first thing you'll hear with any of the new KLEI cables is detail – there will be parts of the music that simply were not there before. In our own experience this comes from two things – firstly a really, really quiet background – if there is noise, it will hide music. Secondly, a cable must get sound from A to B. The first time you hear a cable that does this as it should be, you'll suddenly realize that you have been losing far more than you knew. As much as we hate to say it, there are a great many audio components, and cables, that are literally strangling the life out of music. The new KLEI cables go a long way towards resolving both this problem and your music.

The new KLEI interconnects come in 4 versions – each providing a worthwhile and obvious improvement over the model below it. Although they look similar, if you examine them carefully you'll see that as you go up, better versions of the new Harmony RCA plugs are used. We already know that the original Bullet plugs sound better than most. And that the difference between the original and silver Bullet Plugs was significant. Yet even the new entry level Harmony plug improves upon the Silver Bullet plugs.

So the base model gZero2 starts with an advantage over almost all other cables. Although its called the Copper Harmony plug, the pure copper parts of the plug are actually silver plated. Look closely at next model up – the gZero3 interconnects and you'll see that there is more going on with the actual cables – although this is largely hidden by the woven black sheathing. But importantly they also have the better Silver Harmony plugs fitted. Everything the gZero2 does well, the gZero3 is better at – it's a much more lucid, bigger and detailed sound. While there is a continuity that you'd expect, the difference is far from subtle. I've never actually heard such a big improvement between components for NZ\$150.

So imagine what is going to happen with the gZero6 as it starts out with better terminations again – the Pure Harmony plugs. Short of tearing a set of cables apart to see how they are actually made, I'm going to paraphrase KL to give you an idea of what is going on in there...

## **What's inside?**

The aim of the cable construction is to reduce and control the effects of the Ground on the Signal, and to simultaneously use the Ground to protect the Signal from external interferences such as EMI, EMF, RF, and static charges. The gZero architecture is comprised of hand wound conductors, and implemented in a manner to dynamically enhance electron flow in the Signal conductor, without the use of electronic components. It requires precise calculation, hours of hand fabrication. Each successive model in the gZero range, utilizes a progressively more complex and sophisticated cable architecture, employing varying combinations of multiple neutral/ground conductors, constructed from ultra high conductivity copper and/or silver, to achieve cumulative performance improvements with each successive model.

The gZero architecture is an extension/extrapolation of the design principles utilized in the Harmony Plug. This is actually a really important point that deserves emphasis. Just about every other cable designer used someone else's plugs – and a good number have used the original and silver bullets. KLEI cables are effectively unique in that they are complete products from end to end – the cable wouldn't sound as good without the plugs and it's doubtful any other cable would perform to the same level just because it had the Harmony plugs attached. Even though almost any cable will be improved by the Harmony Plugs.

# KLEI gZero ICs by John Ransley (Totally Wired)

## But back to the cables

If the gZero2 and 3 models are brilliant value and a great introduction, the gZero6 and 10 are a whole different ballgame. What suddenly leaps out of your speakers are whole new songs and albums – there's depth and scale – a solidity that is more akin to a major step up in power or speaker size. The improvement in clarity is startling but it's not in anyway and etched or forward – the KLEI cables don't shout. Percussion – don't get me started! Every sound is in its place and in proportion. *If there is a finer sounding cable than the KLEI gZero10 ICs then we've never heard it.*

KLEI specify a long run in period with these cables – at least 100 hours. Although we started to form conclusions about the quality of the interconnects within the first minute, the progress as they run in is remarkable. Every aspect improves – resolution, smoothness, sound-staging. If you like these cables from the outset, then a month down the track you'll be more than happy with the result.

Are you still with us? Talking about cables can seem completely nerdish so we'll come back to the real point of this – the new KLEI interconnect cables will make your system sound much better. We haven't heard anything as good at any price. And given there are 4 choices in the interconnect range, the only question is how much better would you like?

You could change other components within your system to make an improvement. But chances are it would cost more than even the most expensive KLEI cables. You chose the parts in your system with good reason and what made them good then hasn't gone away. Improving even one set of cables is going to breath new life into the performance of the whole system. It's been well over 10 years since we've found something this good that can benefit so many people with greatly improved musical performance. This is why we do what we do.

*You'll enjoy far improved sound by connecting almost any components – CD players, DACs, pre and power amplifiers. Analogue enthusiasts will be thrilled to find that these interconnects are really quiet and hence perfect for direct connection to turntables and phono stages. What ever the end use and whichever model you select, you'll be thrilled with the sound.*

If you have a choice of places in your system to use these new cables, we suggest between pre and power amplifiers, or between your most used source and amplifier is the best place to start – there may already be a reasonable cable there, but simply move this elsewhere in your system – effectively you are only ever replacing the least good cable in your system. Yet every time you improve the resolution and transparency of your system, not only do all the parts sound better – you set the stage for even greater improvements. If you have the luxury of several separate components you'll find that each subsequent KLEI cable makes an even greater gain than the first – you have more material to work with so there is more to gain. In an all analogue system the chain might be – turntable to phono stage, phono stage to preamplifier, preamplifier to power amplifier. That's three connections that can all be greatly improved.

A digital system may well be simpler – maybe just DAC to integrated amplifier. In which case you can pat yourself on the back for having something more elegant and just go for one of the really good models.

**Don't even think** about a new DAC or Amplifier till you have heard what your present system can do with these cables.

## KLEI™GZSeries cables

Totally Wired Limited, The Terrace Houses, 217 Stuart Street, Dunedin 9016, New Zealand

NZ Toll Free	0800 909 101
Phone	(+64) 03 4790 444
Cell Phone	(+64) 021 963 321
Mail	<a href="mailto:info@totallywired.co.nz">info@totallywired.co.nz</a>
Web	<a href="http://totallywired.co.nz/">http://totallywired.co.nz/</a>