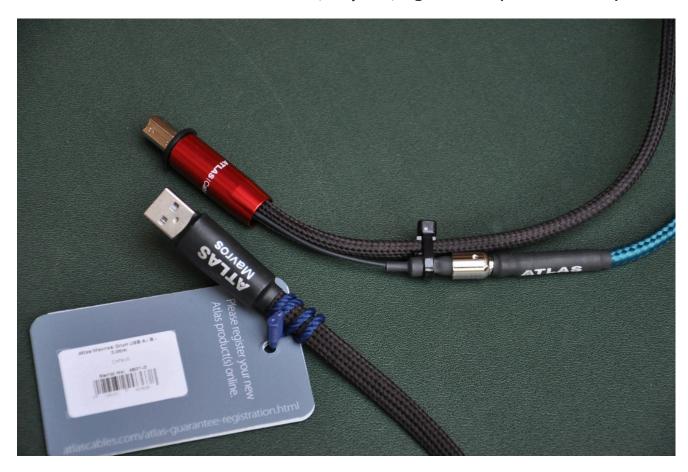
Atlas GRUN with USB Mavros & Zeno Harmonic

"The Atlas Zeno Harmonic cable with Grun is, in my view, as good as transparent in this setup"



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ATLAS GRUN WITH USB MAVROS & ZENO HARMONIC

by Simon Wilce Published on 15 January 2020

This is my HiFi Review of the Atlas Grun system as implemented in two products: the Mavros USB cable and the new Zeno Harmonic headphone cable. Atlas Grun is integrated into their USB cables, headphone cables, and speaker cables. At the headline level, Atlas Grun is their earthing system to the ground that reduces inherent cable noise and interference in the high RF (radio frequencies) environment we all experience these days.

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Design - USB Mavros Grun

(a fair bit of this Design section has been taken from the Atlas site because, quite simply, they're the experts).

The Mavros Grun USB features OCC (Ohno continuous casting) copper data and power conductors combined with low-loss foamed polyethylene dielectric, innovative screening around individual conductor pairs and gold-plated contacts.

Atlas has also implemented its external Grun connection to route all interference to the ground. When designing the Mavros Atlas set out to minimise reflective losses in high-speed USB cables by improved termination methodology, higher purity conductors (OCC copper) and improved screening (Grun) leading to better consistency by length and improved fidelity. Atlas says the Mavros Grun USB is at the pinnacle of what can be achieved with today's materials and technology.

To ensure maximum available bandwidth is maintained through digital cabling numerous factors need to be controlled, attenuation, noise sources, skin effect, dielectric loss, intra-pair skew, shielding, and characteristic impedance. A combination of these elements adds uncertainty into the digital domain, this uncertainty is called jitter and is the No 1 performance killer in digital audio systems.

Attenuation and Characteristic impedance

Atlas use OCC copper combined with low-loss foamed polyethylene dielectric. The twisted conductors are identical in length with a constant distance maintained between the two.

Noise sources and Shielding

The Mavros Grun USB features improved screening via an improved shielding regime, this being augmented by a direct external connection (GRUN) into the system ground.

Skin Effect and Dielectric Loss

The skin effect (higher frequency signals travel closer to the surface where the effective resistance is higher) and dielectric loss is combated by using very pure OCC Copper and a new highly stable and improved low loss foamed polyethylene dielectric.

Intra pair skew

Atlas controls and manages the twist ratios within the cable ensuring every individual internal conductor is a matched length.

Quality - USB Mavros Grun

The Mavros Grun USB cable is thick and tangle-free with a black anti-vibration fabric. It feels soft to the touch and is relatively stiff. The terminations are of the highest quality I've experienced. The Atlas Grun terminal that comes from the USB B connection leads to a blue/green tangle-free fabric with an aerial-style terminal. In my case, I have this connected to a custom earthing plug supplied by Atlas which matches the aerial screw plug. The earth just plugs into the 3-pin plug in the wall.

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Design - Zeno Harmonic with GRUN

The new Zeno Harmonic headphone cable features better conductor material, improved dielectric efficiency, next-generation plug design, and enhanced Atlas Grun construction materials, all assembled by hand in Kilmarnock. I reviewed the original Zeno cable in February 2016, and there was a clear improvement in headphone performance. I said at the time:





THESE ATLAS ZENO CABLES ARE A MUST-LISTEN IF YOU ARE SERIOUS ABOUT YOUR HEADPHONES



The conductors in the Zeno Harmonic are OCC, drawn from a single copper strand in a dual-balanced design. The cables utilise a nitrogen-foamed polyethylene dielectric. The 4-pin (OCC) XLR plug is unique in the marketplace and designed by Atlas specifically for the Zeno. The Zeno Harmonic comes supplied with a 1m Grun cable and is finished in red tangle-free fabric. The Atlas Grun cable is finished in a blue/green tangle-free fabric.

Product highlights

- Ohno Continuous Cast (OCC) balanced conductors for superior conductivity
- · Wide bandwidth nitrogen foamed dielectric
- Optimised to deliver outstanding performance for Hi-End headphones
- Low-mass connectors
- Dual balanced design
- Tangle-free fabric-covered outer jacket
- Grun cable supplied

Commenting on the new Zeno Harmonic launch, Kevin Kelly, managing director at Atlas Cables, had this to say:





TAKING THE LESSONS FROM THE ZENO WE LAUNCHED IN 2015 WE WANTED TO PRODUCE A HIGH END UPGRADE FOR THE WORLD'S HIGHEST FIDELITY HEADPHONES FOCUSSING IMPROVEMENTS ON; CONDUCTOR MATERIAL, DIELECTRIC EFFICIENCY, PLUG DESIGN AND CONSTRUCTION MATERIALS AND METHODS.

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The Atlas Zeno Harmonic comes standard with a 4-pin OCC XLR (possibly the only one on the market) and is supplied with an Atlas Grun cable (1m). It is also supplied with a 4-pin XLR to 6.3mm adapter. The Zeno Harmonic is finished in red tangle-free fabric.

Performance - HiFi Review Set-up

I am listening to a pair of Meze Empyrean headphones through a Questyle CMA 400i balanced headphone amplifier/DAC that is connected to my Dell XPS laptop. The laptop is connected to the CMA 400i with the Atlas Mavros Grun USB A-B (3m) that I'm looking at. Additionally, the Meze headphones are using the Atlas Zeno Harmonic cable with Grun. The Zeno cable is terminated with the balanced 4-pin XLR at the amplifier and the left/right mini 4-pin connector at the headphones. I've not experienced such a high-end headphone setup since I reviewed the Focal Utopias

Control Set-up

I have spent a lot of time on this review, notably switching cables in and out to find the differences. Like VAR in the Premier League, if you're looking too hard it is probably not 'clear and obvious', so I've been very careful to explicitly hear the difference without rubbing my temples, squinting heavily and finding something that is not there. Fortunately, I have an excellent pair of headphones and a very decent headphone DAC/Amp. I'm comparing the Zeno Harmonic cable with the standard Meze cable to the headphones terminated with the unbalanced 6.35mm jack. The USB cable I usually use is, by these standards, an entry-level Atlas Element USB cable.

Conclusions

Fortunately for me, like the Naim XPS DR Review, it is pretty clear with a decent source (24-bit mainly, a bit of Tidal Masters) that the Atlas Grun is presenting an absolutely crystal clear signal to the Empyrean headphones that is beyond that I've heard before. After that, it is simply a question of lining up favourite tracks (ABBA's Chiquitita, see my Empyrean review!). The earthing system is, I imagine, removing all interference in the room and allowing a superb pair of headphones to do their thing. Again, listening to the 24-bit, 96kHz stereo version of Nils Frahm's 'Some', you can just feel the fizzing atmosphere of the single-take performance. Similarly, the track 'K' by Cigarettes After Sex is wonderfully rounded, with the bass line under total control by the headphones. The clicks and accuracy, of the guitar picks in the track are mesmerising and make you play it again. Compared to the standard cable setup from Meze, which I thought was pretty good and I've actively switched in and out on my desk, there is more here, or is it less?

The Atlas Zen Harmonic cable with Grun is, in my view, as good as transparent in this setup. All of this adds up to these excellent headphones having total tonal control. Overall, this is a fabulous sound, and it is a privilege for me to listen to this setup. On my HiFi journey to the best headphones ever, this is surely 'nirvana'. In my rating system, again, these are simply 5 stars, 'Outstanding'.



THE ATLAS GRUN IS PRESENTING AN ABSOLUTLY CRYSTAL CLEAR SIGNAL TO THE EMPYREAN HEADPHONES THAT IS BEYOND THAT I'VE HEARD BEFORE



Love

Enhanced Clarity
Transparency of the cables
Enhanced dynamic output
You do get what you pay for



Cable finish
Easy set-up



Wish

The problem is you'll be looking for new headphones, a new DAC/Amp, etc.

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