



Title: What is Atlas Grun and what are the benefit?

In its most simple sense Grun provides a direct drain path for EMI and RFI to earth for a screened cable via an external connection to the cables internal conductive screen. This means that any air borne external interference or any electrically radiated interference from or to the cables internal conductors are induced into the metallic screen and conducted efficiently to earth. This path is defined, known and direct which helps to remove uncertainty and deliver more predictable lower noise results.

The benefits are that the timing, accuracy and bandwidth of the customers system are all improved and as the musicality of the system has taken a step forward then this opens the possibility to broaden musical taste and listening pleasure.

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'Symmetrical' Interconnect



Following on from above, all Atlas Ultra Latik RCA analogue cables are delivered in what we call a **"Symmetrical form"**, that is there are two identical internal conductors, one for signal and one for the return. The cable screen is unconnected and is therefore "floating"!

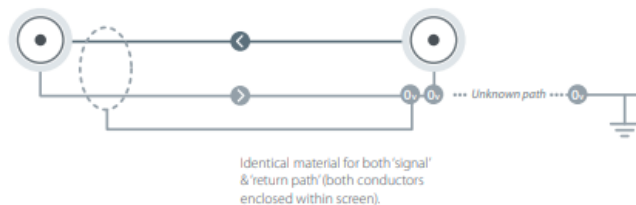
In an RCA connection as this is a high impedance connection and the place where noise can be coupled into the system then you NEED to connect the screen to a known "drain path".

Can't this be done without all the complexity?

Partially - if you connect the cables conductive internal screen to the cables return conductor (the negative conductor) at one end of the cable the EMI and RFI are redirected to ground via the components internal 0v reference. However, as this path to ground is different manufacturer to manufacturer, model to model then the results can be uncertain and random in nature. It has to be said that however that this methodology is far more effective than in an unshielded cable or indeed a cable with a floating (unconnected) screen. We call this methodology **pseudo balanced** as it delivers some of the lower noise benefits of balanced (XLR) connectivity but with the HiFi fidelity of single ended connectivity.

03

'Symmetrical' 'pseudo-balanced' Interconnect

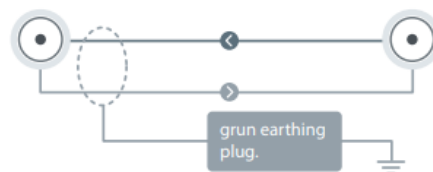


What does the Grun power adapter do?

The Grun power adapter allows you to connect a Grun cable direct from your RCA cables screen to earth via the earth pin of power plug. This is the most direct path for interference to drain to and will deliver THE most stunning results.

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'Symmetrical' with independent earth via grun earthing plug



Interestingly this is a great demo to do for yourself, connect the RCA cables to your system with the Grun cables attached to the Grun power adapter. Have a listen to this configuration and then plug in the power adapter directly to a wall socket outlet and be amazed!

Can't I use an earth stud on the back of one of my products?

Yes, you can as every Atlas Grun cable is supplied with a small adapter to allow this to happen. However as explained earlier this ground connection, manufacturer to manufacturer, product to product takes a different and therefore in our terms undefined route.

I notices that there are two connections on my Ultra Latik RCA's do I need two Grun cables?

Whilst both channels on your Ultra Latik RCA's need to be connected the choice of whether to use an Atlas Grun 1:2 or two Grun 1:1's is down to the physical setup you have. If your RCA input/outputs are spread out use two Grun 1:1 if not use the Grun 1:2.

Is there any difference in approach in the Grun Ultra Latik RCA and say the Grun connections on your loudspeaker cables?

Very much so and these two cable topologies benefit from Atlas Grun in two very different ways. RCA inputs as mentioned are high impedance points and therefore your interest is in reducing the amount of interference that can conduct into the system. Loudspeaker outputs are generally low impedance points and generally don't suffer too much from inbound interference, however once you connect Loudspeaker cables then these tend to broadcast broadband noise throughout the room therefore its advisable to control this too.

So, is there a hierarchy to the application of Grun?

We believe in the adage "garbage in garbage out" so we always recommend that you improve you signal level screening first (analogue or digital) before turning your attention to the loudspeaker screening.

Are the benefits of Grun cumulative?

Yes, we believe so and the demonstrations we have carried out to date reinforce our sound engineering thought processes. Once you have controlled all the signal screening then the Loudspeaker screening reduces the RF load on the overall system. Therefore, the benefits are felt by all the equipment in your system.

Can Grun be applied to XLR connections?

The reason we looked at a Grun solution for Hifi RCA cables was to try and emulate the screening performance of XLR cables whilst maintaining the focus on the fidelity delivered by many great single ended (unbalanced) analogue designs that are implemented in THE best High-end equipment. The XLR format takes care of grounding/screening well and as such we don't want to interfere as they say 😊

Can we apply the same processes to digital cables?

Without getting into the old chestnut of how digital cables make a difference then clearly screening is a critical part of digital cable designs. If you want to have a faster network around your office or home, then you specify and fit higher bandwidth cables. These cables are categorised in performance and when you analyse what differentiates each category from the other then generally it's the screening and termination performance of the cable, pair to pair, cable to cable that make the difference.

Now USB and Ethernet cables utilise twisted pair and shielded twisted pair technology to deliver lower noise and higher bandwidth systems. If you reduce the "Work done" by the system to recover all the bits then you have created the environment upstream for better fidelity.

So, the proof of the pudding is in the eating so get along to your local dealer and have a demonstration.