

# Gotham Cable and Me

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The following is an account of my experience with using Gotham Audio cable in my two-channel, high-end audio system and, ultimately, of why I have completely rewired the system using GAC-4/1 interconnects, GAC-SPK speaker wire, and GAC-1 S/PDIF-Pro and GAC-2 AES digital cables.

Before I say anything specific about that, let me say few words about my system.

In the main system, which I use for really serious listening, the speakers are Thiel CS 1.6s, with the outriggers; the power amps are Pass Labs Aleph 2s; the pre-amp is a Pass Aleph P, revision 1.7 (i. e., with the remote control). On the analog side, the phono pre-amp is a Pass Labs XOno; the 'table is a VPI HW-19 Mk IV, with the TNT platter, SAMA, and SDS power conditioner; the arm is a Graham 2.2; and the cartridge is a Shelter 501 II. The digital source is a Pass Labs D1 DAC fed by a Logitech Transporter, which plays music from a central server. Since the D1 has its own volume control, I usually feed it directly into the amps, bypassing the pre-amp.

Prior to my exposure to Gotham cable, the wiring in this system was all FMS, though much of it had been re-terminated or otherwise modified by me. In the main system, speaker cable was 18 inch pieces of FMS Zero; pre-amp to amps was a 7m run of FMS Nexus 2, balanced; from the phono stage to the pre-amp was half a meter of Nexus 2, single-ended; the phono cable itself was made from two 1.2m runs of Zero, terminated with WBT RCAs and a Cardas DIN.

For those not familiar with FMS cable, let me say that, though little known, it is widely respected. The cable is designed and hand-built by Alex Gibson, who was responsible for some of the early Audioquest designs. In the northeast, where Gibson lived and worked for a long time, it was treasured by the few of us who were able to get our hands on it. As for price, the two pieces of Nexus 2 cable I had would have listed for around \$600 and \$2500; the Zero would have been comparably priced, though was from the previous generation.

The system lives in my basement media room, which is about 27x13 feet. The

speakers are on the long wall, with a couch across. The listening position is about 11 feet from the speakers, which sit on either side of a large home theater set-up. The equipment itself is off to the left, sitting on a fairly cheap Prestige rack; the turntable lives on an Arcici Lead Balloon stand, though the top has been replaced with a 1.5" slab of granite.

My system, though I have heard better, is one with which I am generally very happy. Even before becoming familiar with Gotham cable, I regarded it as natural and musical. The Pass electronics are extremely transparent but also have a natural warmth that many people regard as "tube-like". In any event, the system had none of the top-end harshness sometimes associated with solid-state equipment, and yet it seemed open, airy, and revealing. Perhaps the most noticeable feature of the system, though, was its soundstage, which was as wide as that of any system I have ever heard.<sup>1</sup> It extends *way* outside the speakers, which are themselves separated a bit wider than is common, I think. Yet the images are fairly sharp, and the center image is rock stable. If the system as a whole has a shortcoming, it is probably that it is a little bass shy. The Thiels are -3dB at 48Hz.

Let me add a word about myself, too. As may be clear from the preceding, I've dabbled a bit in DIY audio. This has mostly consisted of re-terminating various sorts of cable, though I've recently built a simple pre-amp, too. The common attitude in the world of high-end audio, that if it's more expensive it must be better, I find annoying, and so I've long taken an interest in the products that are occasionally trumpeted as "giant killers". So I had a listen to an Optimus portable CD player that was supposed to be amazing; to the NAD 304 integrated and 5000 CD player; and more recently, to the much ballyhooed T-amp. Most of these turned out to be good bargains, but hardly able to compete with their more expensive brethren. And so I approached Gotham cable with a mix of excitement and skepticism, being more than ready to write it off as yet another fad.

I had seen Gotham cable advertised on various audio websites, and had used some of the digital cable when wiring my home theater, but I had never thought about trying the analog cables. The person who sold me the D1 mentioned, however, as we were discussing our mutual love for Pass Labs, that they had used Gotham cable to connect the two channels of their top-of-the-line, \$10,000 X0.2 pre-amp, when it was used in mono mode. So I figured the stuff had to be worth a listen. I thus ordered some GAC-2 and GAC-3 the same online source where I'd gotten the digital cable and set to building some interconnects. For the GAC-2, I used one conductor each for signal and ground; for the GAC-3, I used two conductors for signal and one for ground; in both cases, I grounded the shields at the

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<sup>1</sup> This includes the best system I have ever heard outside a high-end stereo store, and when the owner of that system was at my house, he too commented on how wide my soundstage was.

source end only, as is common among audiophiles. I also made some balanced cable from the GAC-3.

My immediate impression was extremely favorable, so much so that I decided to take the cables I'd made to my local high-end shop to see how they performed in a system other than mine.<sup>2</sup> I first compared the GAC-2 to a well-known cable that goes for about \$400 a meter pair. This was no contest. The other cable didn't sound awful by itself, but by comparison with the GAC-2, the overall presentation was somewhat cold and uninvolved, and the soundstage did not extend much outside the speakers, if any. The GAC-2, on the other hand, threw a pleasantly wide stage and made the entire system sound somehow louder, though I wasn't changing the volume at all when switching cables. My main thought was that the GAC-2 had what British audiophiles call "pacing". It seems as if things just happen more at the right time, so that everything falls nicely into a groove. The GAC-3 sounded even better. The term I used to describe it at the time was "delicate". The sound was not analytical by any means, but yet was full of the kind of detail that fully reveals the emotion in the music. Perhaps a better word would have been "refined".

It was as a result of this experience that I wrote Lew Frisch to inquire about ordering some remnants. After a brief back-and-forth, Lew offered to send me several samples of both analog interconnect and speaker cable so that I could experiment with it and see what sounded best. I also learned from Lew that the GAC-2V1 and GAC-4/1 were what were primarily being used by other audiophiles. So I waited expectantly to receive my package and, the day I got it, started building some more cables. I made unbalanced cables from the GAC-2V1 and made both balanced and unbalanced cables from the GAC-4/1.<sup>3</sup> In the latter case, I used two conductors each for signal and ground in the unbalanced cables; in the balanced, I used two conductors each for + and - and let the shield handle the ground leg.

At this point, I was just replacing one piece of cable, the short and very critical run between the phono stage and the pre-amp. First up was a pair built from GAC-2V1. It was clearly better than the GAC-2 or GAC-3, in all likelihood because of the much lower capacitance, which is itself likely due to the use of polyethylene as insulation rather than PVC.<sup>4</sup> More importantly, the GAC-2V1 was also clearly better than the Nexus 2 to which I was accustomed. Now, as I said, I'd previously been quite happy with my system. But replacing the Nexus with the GAC-2V1 made it very clear what had been missing. I don't want to use too many audiophile clichés, but if I were going to do so I'd want to talk about "inner detail", "microdynamics", and "palpability", all of which adds up to a much more realistic

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<sup>2</sup> The electronics were all Nagra; I don't recall what speakers we were using.

<sup>3</sup> I also experimented with some other cables, including GAC-1 Ultra Pro. But none of these sounded as good as even the GAC-2, so I won't discuss them further.

<sup>4</sup> DIY cable builders have long noted the deleterious effects of PVC on high-end extension.

sense of a person who is singing, and not just the voice of a person that is being reproduced, as if there were no body from which it emerged. Sometimes I felt as if part of what made the presentation so convincing was a sense for the singer's breath, within and behind the voice, a breath that is present in the silences between notes, too. As for instruments, the effect was similar. I had a much more complete sense for all the very different sounds that the instruments were making, and not just for the dominant sound. With an (acoustic) guitar, for example, it is not just a sense for the body of the instrument, but for the way the sound emanates from the instrument, and not just from the strings. This makes the instrument seem larger, and may be part of what explains my persistent sense that the music seems louder through the Gotham cables.

Much of what I'm reporting is surely due to increased high-end extension, but it is presumably also due to how the double Reussen shield protects the signal from noise. In any event, even just replacing the one cable, the resolution of the system seemed to increase dramatically. Among other things, this led to an impressive increase in the width of the already very wide soundstage. Indeed, it seemed as if the soundstage no longer had any limit. It wasn't that the primary sounds of the instruments seemed to come from that much farther outside the speakers. Rather, on good recordings, the ambience, by which I mean the sound of the hall or room, seemed to extend to wherever it naturally would be, however far outside the speakers that might be.

One thing I learned quickly was that the plugs I used to terminate the cable made a very large difference. I tried several different plugs that I had lying around, including a couple different varieties of Neutrik RCAs. What turned out to be best were WBT-style plugs from Parts Connexion,<sup>5</sup> but I suspect that true WBT plugs may sound even better. (I'll be investigating that shortly.) With the wire practically being free, by audiophile standards, one can definitely afford to invest in good terminations.

Another thing I learned was that these interconnects were taking a very long time to break in. (One friend to whom I sent a pair also commented on this.) I'd say that the sound of the cables did not really stabilize until after about 30–40 hours of use, and during this time the character of the sound changed a fair bit. Mostly, this was a kind of mellowing, but, as I'll mention below, the sound of the Gotham cables seems to change enormously from recording to recording—which means that they probably don't have much sound of their own, in fact.

Once I had become somewhat accustomed to my system with the GAC-2V1, I started to experiment with the GAC-4/1. First, I compared balanced runs of it and the GAC-3 to my Nexus 2, all of these being used between the D1 and the power

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<sup>5</sup> These are part number Connex-RCA-53455 and cost, as of this writing, \$8.75 a pair.

amps. I expected the GAC-4/1 to be better than the GAC-3, since the GAC-4/1 was more like the GAC-2V1—in particular, by using PE insulation—and indeed the differences between the GAC-4/1 and GAC-3 were very reminiscent of the differences between the GAC-2V1 and the GAC-3; the differences between the GAC-4/1 and the Nexus 2 were similar to those between the GAC-2V1 and the Nexus 2. The high end was much smoother, and yet much more extended, at the same time.

After those results, I decided to do a careful comparison of the GAC-2V1 with the GAC-4/1, for unbalanced interconnects. The differences here were more subtle, but the GAC-4/1 ultimately seemed better. Unsurprisingly, the cables were of very similar character, but the GAC-4/1 was just a *bit* more extended on top and just a *bit* more detailed. This was likely due, again, to the lower capacitance of the GAC-4/1, but may also have been due to the fact that twice as much wire was now carrying the signal. In any event, and to put it more simply: The GAC-4/1 seemed to do just a little better what the Gotham cables all seemed to be doing well. So my own view is that GAC-4/1 is the best of the Gotham cables for analog interconnects, whether balanced or unbalanced. I should emphasize again, however, that a very large part of the character of the cables will be imparted by the terminations that are used. This is inevitable when the cable has so little character of its own.

I have spoken repeatedly of the high-end extension of the Gotham cables and so should note that, at various points during these experiments, I found myself worrying that the Gotham cables were a bit “bright”. On some recordings, at least, the treble could sound quite harsh. But then, I’d switch to another recording and find myself worrying that it sounded a bit dark. After a great deal of listening, then, I came to two conclusions. The first was that the recordings that sounded harsh *were* a bit harsh, and the ones that sounded dark *were* dark.<sup>6</sup> Even with my old wire, I could hear these features of the recordings, but I couldn’t hear them as clearly as with the Gotham cable. The contrast between the harsher recordings and the other ones was there either way, but the increased resolution that I was getting from the Gotham cables was allowing me to hear everything better, including, of course, the warts. The second conclusion was that the increased resolution was also allowing me to hear some of my system’s warts. As any audiophile will tell you, there is nothing unusual about any of this. It often happens that a major upgrade to one’s system will ultimately expose the limitations both of certain recordings and of one’s existing system.

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<sup>6</sup> In some cases, I found out in the end that the process of ripping the CDs to my server had been a bit error-ridden. The sound was much better after I re-ripped these CDs in such a way as to allow me to check two rips against each other for consistency. The simplest method of doing so is to use `cdparanoia` to rip the disk twice, then use the `diff` utility to compare the resulting files. Alternatively, one can let `rubyripper` automate the process.

What I learned in the end, then, was that the speakers had become the weak link. The lack of bass extension, which wasn't so troubling before, had become a major issue, since the extension on the other end made the tonal balance sound seemed tipped too much toward the top. The increased clarity available with the Gotham cable also revealed a harshness in the upper midrange and lower treble, especially at higher volumes, on which some reviewers had commented, but which I'd never heard myself. But now, all of a sudden, there it was. The solution, therefore, was new speakers, and I've since acquired a pair of BC Acoustique A2.5s. The apparent brightness is gone.

Once I had experimented enough to decide which interconnects were preferable, I was able to start investigating the speaker wire. I tried four different types: SPK 2x2.5mm; SPK 2x4.0mm; SPK 4x2.5mm; and GAC-SPK 2x2.5mm. The first three were terminated in the obvious way, with crimped bananas. The latter was more of a challenge. The cable is described as 'quaxial' and is essentially a coaxial design, with a center conductor that is wrapped by what looks, to all appearances, like the double Reussen shield you find on the shielded interconnects, though it is explicitly intended to be used as a conductor. But the asymmetrical character of the cable made it seem unwise to use it in the obvious way.<sup>7</sup> I thus constructed my first pair "shotgun style", using two pieces of wire for each channel and using only the center conductor in each case.

The difference between the SPK wires and the FMS Zero that had been in my system was not substantial. The SPK did sound a bit better and was good enough for me to decide to use the SPK 4x2.5mm in my secondary system, where longish runs of doubled wire are inconvenient. But the GAC-based speaker wire was a lot better than the FMS. The differences were more of the same, I guess, but I wrote in my notes at the time that "it's becoming hard to know how many more veils can be lifted from the music". On David Bowie's "Golden Years", for example, which I often use as a test-tune, the three central voices in the chorus were cleanly separated, more than I'd ever heard before; this is difficult, because the voices are all Bowie's. What was more impressive still, though, was how well the chaos on this song was handled and, as so often with Gotham cable, how clean and extended the top end was. The level of detail was astonishing.

Taking a cue from a note on the Gotham website that I'd missed, and was noticed and pointed out to me by a friend who was also experimenting with Gotham wire, I built another pair of speaker wires by stripping the insulation and using *both* conductors in a single run. The difference between this pair and the original pair was striking. The treble, in particular, became yet smoother and more refined, and the bass seemed to have a power that it had previously been missing. It seems clear

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<sup>7</sup> This is in part because not all amps ground one leg. The Aleph amps do, though.

that this is the right way to terminate GAC-SPK.

It's funny how my standards have changed as I've gotten accustomed to Gotham wire. When the wire for a 1m pair of interconnects costs about \$6, I find it hard not to think of GAC-SPK as expensive, since the need to double the wire means it costs me about \$6 a foot, plus the cost of the terminations. So an eight foot pair costs a little over \$100. Of course, by audiophile standards, that is about the same as "free", but it speaks to what an outstanding value this cable is that it would seem for a moment to be anything else.

Since I mentioned my secondary system, I should say a word about it. This system is in our main living area and so is what I listen to most of the time, though more when cooking or reading than when sitting and really concentrating on the music. The speakers are again Thiel CS 1.6s with outriggers; the power amp is an Adcom GFA-5800; the pre-amp is a homemade Pass DIY B1; the source is an Adcom GDA-600 DAC fed by a Logitech Transporter. Speaker cables were originally 7ft pieces of Zero; the pre-amp to amp was 5m of Zero; and there was a short piece of Zero between the DAC and the pre-amp. Even in this system, when I am not listening as closely, using the Gotham cables throughout makes a sufficiently large difference that my wife noticed when I switched back briefly to the FMS.

Ultimately, then, I decided I should completely re-wire the main system with GAC-4/1 and GAC-SPK. The final piece that needed making was the DIN-to-RCA phono cable. This consists of two pieces of GAC-4/1, with just two of the conductors from each wire being used, since larger wire simply won't fit into the tiny holes provided in the Cardas DIN plug.<sup>8</sup> A separate piece of 24 gauge hookup wire is used for the ground pin. The RCA plugs were the same WBT-knockoffs from Parts Connexion.

The result of having Gotham wire throughout the system was truly incredible. I have already mentioned the qualities that are so obvious to critical listening: detail, extension, air, space, and the like. But that is not at all what is most impressive about this wire. Rather, the overall effect is that the music just sounds more like music. It is lifelike, natural, relaxed, and involving. I find that my mind wanders much less when I am listening now than it did just a few short months ago, because it is so much easier just to listen to the music and to forget about music reproduction; to "relax into the illusion", as I often tell friends when they visit. And thus I find myself thinking those magic thoughts that audiophiles know always mean that they have hit upon something special: "I can't wait to hear [insert great album here]"

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<sup>8</sup> I intend to experiment with other configurations, for example, just using one piece of GAC-4/1. The downside to this, potentially, is that the internal conductors have to be separated and therefore taken outside the shield at the RCA end.

again!” I find myself pulling out album after album and listening far longer than I’d intended. And isn’t that what it’s all about? Just being able to enjoy music?

It is possible, to be sure, that there are better cables out there. But my experience, and that of the friends to whom I’ve so far sent cables to test, has convinced me that interconnects carefully built from GAC-4/1 and quality connectors can easily compete with cable literally costing fifty or a hundred times as much. It is indeed a “giant killer”.