

# FURUTECH

Canada HiFi ADL GT40 Review



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## productreview

### Alpha Design Labs GT40 USB DAC with Phono Stage (by Furutech)



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It is an interesting time for audio enthusiasts, a time when old world vinyl maintains an ever evolving co-existence with the new age hard drive-based audio world. Today, a growing number of music lovers own both a vinyl audio system and a computer that's loaded with digital music. To keep up with this trend, audio manufacturers are introducing increasingly innovative, cost effective devices which cater to both the analog and digital audio categories.

One such company is Furutech, a Japanese-based world-class manufacturer of high-end audio cables, accessories and system enhancers, which recently opened a new division called Alpha Design Labs (ADL) dedicated to designing affordable audiophile products with the same quality that Furutech has long been known for. The first ADL product to hit the market is the highly versatile GT40 USB DAC (Digital to Analog Converter), priced at \$499, which has a built-in phono stage and a headphone amplifier features not normally found in DACs. Sometimes great things come in small packages. Could this be one of those times? You'll have to read on.

The GT40 is a tiny but solid, audiophile grade device built to Furutech's outstanding standards, measuring 150 mm wide by 111 mm deep by 57 mm high. The rigid chassis is carefully shielded and features thick brushed aluminium plates in the front and rear. The front panel sports a power button, a machined volume control dial, a 1/4-inch headphone jack and a source selection button which allows you to switch between Phone/Line and USB. The rear panel has a tiny sliding switch which tells the GT40 what kind of signal to expect MM, MC or Line through its single gold-plated, Teflon-insulated analog RCA input. Then there is the analog RCA output, a USB 2.0 port, a phono grounding terminal and a 9V AC power supply input (the device is powered by an external wall wart power supply). The GT40 sits on four rubber feet and weighs a paltry 785 grams. To top it all off, Furutech includes its own 1.5 meter GT2 USB cable in the box with the GT40.

Now let's take a look at what the GT40 can do for you and what makes it distinct from other DACs at this price point. At its heart the GT40 is a top-notch USB DAC. Those with music collections on their computers or laptops can send a digital signal to the GT40's USB input (via a USB cable) and enjoy analog output at data rates up to 24-bit/96 kHz. Furutech utilizes a low latency USB 2.0 audio driver that will allow playback and recording up to 24-bit/96 kHz. All USB connections are self powered but in order to accommodate the higher data rates Furutech has utilized an outboard power supply to provide enough power. The external power supply also provides a noise free environment for the built-in, sensitive phono stage.

But the GT40's DAC functionality is only the beginning. The GT40 also has a high quality Analog to Digital Converter (ADC) built-in which will accept analog line (like a tuner) and phono signals. Yes, it is a very pleasant surprise to see a phono stage (switchable for moving magnet and moving coil turntable cartridges) in a DAC at this price point. What will this feature allow you to do? You'll be able to convert and record analog line-level and phono sources to digital and output the signal up to 24-bit/96 kHz via the USB port. This means that you can archive your valuable LPs and other analog sources in the digital domain and then play them back through the GT40 when connected to a preamp or integrated amp.

Still, it doesn't stop there. The GT40 offers a built-in headphone amplifier capable of driving most high performance headphones.

So it's easy to see that the GT40 has a very well rounded feature list but how does it all come together when listening to and recording music?

My system for this review included a pair of Elac Anniversary 208 floor standing speakers, Red Wine Audio Signature 70 mono blocks, a Modwright LS36.5 preamp, an Esoteric X-05 CD/SACD player, a Goldring GR1.2 turntable (with an Elektra MM cartridge) and a Windows-based Toshiba laptop. I connected the GT40's RCA output to the Modwright LS36.5 preamp.

I began by evaluating the GT40's main function, namely its USB DAC performance. Without an upgraded soundcard, most computers leave much to be desired from their audio playback. A typical soundcard's analog output sounds muddy in the mids, crushes many musical details, lacks any definition in the bass and has a fizzy treble. But it doesn't have to be this way my friend a device like the GT40 by-passes the computer soundcard by grabbing the digital signal from the computer's USB connection and does a much better job of converting it to analog before it's sent to the amplifier

Setting up the GT40 should be a snap whether you have a Windows or Mac based OS. I used the provided USB cable to connect the GT40 to a USB port on the Toshiba and the necessary drivers installed themselves automatically on the laptop. I confirmed in the Windows control panel that the volume output was set to 100 percent and that the audio output was set to USB (as instructed by the manual), and I was ready to roll. Playing digital music files through the GT40 was

like discovering the songs all over again. Suddenly the midrange offered a substantially cleaner presentation and was filled with details that were previously completely obscured. Much of the digital haze was lifted and I instantly began enjoying a much expanded, better defined soundstage. The lower frequencies had good definition and extended into much lower registers than previously. The highs benefited from a cleaner, more natural presentation.

Completely satisfied with the USB DAC performance, I decided to record a couple of LPs through the GT40. I had an unopened vinyl copy of the Decca Albeniz: Suite Espanola that I put on the Goldring platter, which seemed ideal for digital archiving. When I initially connected the GT40 to the laptop I was given the opportunity to choose the recording resolution from 16 and 24-bit and 32/44.1/48 and 96 kHz. I went ahead with 24-bit/96 kHz. While monitoring the recording via the analog RCA outputs into the two channel system I was staggered by the dynamics on this virgin slab of vinyl and had a great reference to gauge the quality of the recording and playback via the laptop. I played back the first side from the newly recorded digital files at 24-bit/96 kHz and was instantly drawn into the music. Using a laptop gave me the extra benefit of operating the source off the grid(since I was using the battery power) which contributed to the clean, effortless sound that I was presented with. Despite the transcription of the LP surface noise, the digital files sounded cleaner than the original analog playback. I recorded the same side at 16-bit/44.1 kHz and the presentation was flatter, lacking in relative dynamics, but still offered a decent red book performance. This is one killer sounding USB DAC that will be right at home in modest or high-end digital music playback systems.

Next, I proceed to evaluate the GT40's phono stage performance. Thanks to the fact that I had several LPs and their matching SACD versions, I was also able to make some direct comparisons between them. I set the GT40's volume control at about 2 o'clock on the dial which closely matched the output level of my reference Esoteric X-05 disc player. The GT40's phono stage offers a very clean sound, without any hiss or hum, likely as a result of using an outboard power supply. I started with Coldplay's Viva la Vida LP, a recent recording and pressing, and quite frankly was stunned with the sound. I was immediately presented with music that had an expansive soundstage, decent spatiality and impressive dynamics. I then pulled out an old 1980s LP soundtrack to Cat People by Giorgio Moroder and this disk had even more dynamics than the Coldplay disk. This made me wonder what some classic 60s and 70s LP's would sound like. I popped The Rolling Stones Out Of Our Heads Decca French mono pressing LP onto the platter and despite the snap, crackle and pop of an older, well-played disc I was drawn into the music, tapping my feet and singing along. It's amazing how the brain tunes out the extraneous noise and focuses on the music. Next I played a very clean copy of Elton John's Tumbleweed Connection LP of which I also have the SACD version. Again I was extremely impressed with the overall musicality of the GT40's phono stage and the analog output stage. This is a country-tinged homage to Elton's favourite performers at the time, like The Band, so there is lots of virtuoso interplay between the musicians. I cued up the SACD and switched back and forth comparing the vinyl presentation to the high rez SACD version. I was initially drawn to the apparent richness of the mid range of the LP, which I concluded was due to the more forward presentation of the mid frequencies from the vinyl. The SACD offered more air around the instruments and a more defined and extended bottom end. But the LP was competitive as far as dynamics, decay and overall musicality went. The GT40's phono stage more than held it's own against an extremely well regarded digital source, the Esoteric X-05.

For the final part of this review, I reached for a pair of open-back Grado SR125 headphones which I plugged into the headphone jack in the front of the GT40. I evaluated the headphone amp section by listening to various selections on vinyl and high rez digital files from my PC. After an extended listening session, I concluded that the headphone amp in the GT40 offers lots of headroom, a satisfying bass response and a well defined soundstage. The performance was extremely clean and musical via the Grado headphones, earning the GT40 a top spot in my books.

The Alpha Design Labs GT40 USB DAC with Phono Stage (by Furutech) is a masterful little device with a long list of features and strengths - all at a price of just \$495. Given its build quality and performance, this is one of the best bargains I've come across in a long time in the audio world.

<http://www.canadahifi.com/Alpha-Design-Labs-GT40-USB-DAC-review.php>