

**This is how I set up my new piece of “audio gear” to enable hearing hi-resolution music using my Geek Pulse. This new piece will only be used for audio. It is, of course, a laptop computer:**

- Purchase a new laptop if possible. I got one with a basic i3 processor, 1 TB drive, 4 GB memory, a CD/DVD RW drive, HDMI out, and 3 USB outlets as a “scratch and dent” special from the Dell Outlet store for \$240!
  - I went for a large drive to hold music without needing a network drive. Depending on your number of recordings, you may have to add more drive(s) or use network drive(s).
  - Playing music does not require a lot of processing power (but see below to make sure you turn off unnecessary background jobs).
  - You must have at least 4 GB memory. The more the better.
  - Buy (or use) a USB mouse – the laptop mouse interface is hard to use.
  - You may want to buy an external CD/DVD drive since laptop drives are hard to use.
- Another option is to buy a “used” (or refurbished) small footprint desktop.
  - You will have to get a monitor, keyboard, and mouse. These are pretty cheap now.
  - Make sure that a valid Windows OS is installed on the desktop.
  - Get the latest possible version of Windows (even if you do not like Win 8.1, for example) to maximize the “life” of your computer.
  - Desktops can more easily be upgraded than laptops if you want to add disk space or memory. Be sure you can do that, though. Some desktops have memory limitations.
  - I admit that I prefer a laptop since this will take up less space on my audio rack.
- Set up your network connection (wireless and/or wired depending on how convenient your wired connection is). All laptops have built-in wireless, as do many desktops now.
- Perform Windows upgrades as needed. Any new laptop will be “out of date” on these updates. My new laptop was 110 updates “behind”, and it had Windows 8.1 pre-installed.
- Install Antispyware software (I use “Super AntiSpyWare” – very cheap).
- Install Virus protection (I use McAfee because I have a 3 PC license). There are others out there just as good or better.
- Install Adobe Acrobat Reader (so you can read manuals on-line). This is a free download.
- Make sure browser is working with your network connection. I use Microsoft Internet Explorer because I am used to it.
- Install the Geek Pulse windows driver (or driver for your DAC), along with Light Harmonic Audio Driver Control Panel if you have a Pulse. The LH Labs web site has detailed instructions on how to do this, and it was actually pretty easy.
- Become familiar with use of Windows Control Panel for setting up your music files and drivers.
  - You can add a Control Panel Window 8.1 “pane” very easily from the applications list.
  - Control Panel is where you set audio output, power options, and check for windows updates.
- The desktop function of Win 8.1 is very similar to the Win 7 interface, so one can use this to have shortcuts to Adobe, McAfee, Super AntiSpyWare, and of course JRiver with a Win 7 “feel”.
- Go through Windows 8.1 “panes” that are started by default and reduce the number of these processes that are running in the background, like news and finance feeds.
  - Right click on each Windows 8.1 “pane” that you want and choose “turn live tile off” or delete it completely.
  - I do not use email on this laptop, I use it exclusively for audio use.
  - One can also create “panes”, such as one for JRiver, so you do not have to use desktop.
- Install JRiver or “Foobar” music software (your choice). I chose JRiver due to a more user “friendly” interface – your mileage may vary.
  - Download the product from JRiver web site.
  - Purchase the license you prefer (I bought just the Windows license).

- Buy the license using the JRiver menus on your laptop (not a separate download), and it will install it automatically into your JRiver application.
  - JRiver documentation shows how to do this.
- Set up JRiver options for your DAC (see Dennis’s presentation also),
  - For the Geek Pulse, I used the detailed instructions from LH Labs.
    - NOTE: If you run JRiver without the Pulse connected, the output device reverts to your laptop’s device. You may need to reset the default audio output to your Pulse (DAC).
  - Sam/Dennis have a couple of changes they recommend for the output device settings:
    - If the output device is the Pulse, use Kernel streaming with .5 seconds buffering versus WASAPI streaming that LH Labs recommends with 100 millisecond setting. I use the Kernel streaming.
    - Use 32 bit versus 24 bit bitdepth which LH Labs recommends. I kept it at 24 for now to save disk space.
    - No bitstreaming option chosen versus DSD setting LH Labs recommends. I kept the DSD setting “on” for possible use by DSD downloaded files.
  - Sam/Dennis have added a couple of other options to set (mainly for ripping and conversions):
    - DSP settings off (do not up-sample on the fly).
    - Read speed of 4 times for CD drive(s) instead of faster speeds.
    - Encoder set to “uncompressed wave” file.
    - File location set to a thumb drive (or other SSD storage).
- Install HD Tracks Downloader (it will be installed after you buy something from them for the first time from your laptop) and maybe other software to download music to store on your hard drive and/or thumb drive(s).

If you have a Geek Pulse, buy the Apple remote (\$20) and pair it with you unit – VERY easy! This enables you to control volume and options from your listening chair.

Use Dennis’s instructions when you want to rip a CD to a directory on an SSD, and if you want to convert those files to 24/88K or 24/176 format. I found I could not do both of these steps at one time. See their PDF document for details on how to do these steps and also settings they recommend.

The one thing I have not yet really set up in JRiver is how to organize all the music using playlists, etc. Right now I use the “explorer” function to find the file(s) I want to listen to. I manually create folders on my SSD (thumb) drive that I am using for now to store hi-resolution music. My next step is to learn how to use the JRiver interface to create play lists, how to name folders and files, etc. to store my music on the 1 TB disk on the laptop.