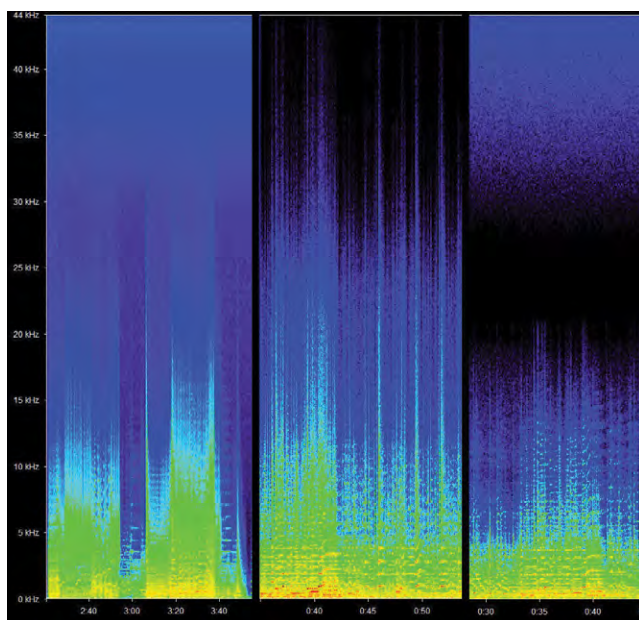


So Is It Really Hi-Res?

A Quick, Simple Way to Check Frequency Range

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It's been known for several years now that, while it's not common, some SACDs actually have CD-quality audio; Norah Jones' *Come Away with Me* is an infamous example.

While working on my Michael Rabin overview in Issue 311, I listened to Blue Moon Records' SACD of *The Magic Bow*. It seemed to be missing high frequencies, and it had a perplexing stuffy quality. That seemed odd for a format that should stand out for its dynamic range. I wanted to rip the SACD layer and visually analyze the frequency response, but for a long time, the only way was with certain Sony PS3 gaming consoles. The process looked fussy and far too daunting.

Searching for a quick, manageable alternative, I found a thread on the HifiHaven.com forum detailing how to rip SACDs to my computer using only a Blu-ray player, two free software programs (SACD_Extract and AutoScript), and a Wi-Fi connection. Google "HifiHaven rip sacd," and a thread will explain that process.

I picked up a Sony BDP-S6200 (now nicknamed "Jack the Ripper") for around \$50 on eBay and was soon ripping away. The results? A frequency spectrum analysis of Blue Moon's SACD showed a clear cutoff just above 22kHz, consistent with CD-quality files. The graphic on this page compares, from left to right, Gershwin's *Cuban Overture* from an RCA SACD with the Boston Pops, "Hora Staccato" from an original Capitol *Magic Bow* LP, and "Hora Staccato" from Blue Moon's SACD. You can see where

the frequencies peak, with the *Cuban Overture* and *The Magic Bow* LP spiking much higher than 30kHz.

Whatever debatable improvements occur during WAV-to-DSD conversion, the process cannot restore frequencies that have been cut off or filtered out. With hi-res, I expect to get the full frequency range. Since many readers would love to rip SACDs for archiving, or streaming files from their media servers, or seeing exactly what they bought, I felt this information should be shared. It's a tool: Use it wisely and legally.

HifiHaven lists several different Blu-ray players from Sony, Pioneer, Oppo, and others that will work. You'll need intermediate computer skills, but people on the forum are eager to help. The most difficult part is cobbling together the information; no single post has all the instructions and links. Search the thread for your model number, as some processes vary slightly between models and between Mac and Windows. Here's my process, so you know roughly what to expect.

On my PC, I downloaded and extracted the SACD_extractGUI program folder to my desktop; rb.gy/lacgo0 will take you directly there, or see post #284 in the HifiHaven thread. Then I made sure Java was installed and up to date. Next, I went to post #26 and downloaded the appropriate AutoScript program folder and transferred that to a ded-

icated, empty USB 2.0 thumb drive.

From there, I connected the Sony to my Wi-Fi and updated the firmware. Under Setup - System Settings, I turned Quick Start Mode on, then I went to Setup - Network Settings - Network Connection Status, wrote down the IP address, and turned the power off.

Back at the computer, I opened the SACD_extractGUI folder and double-clicked SACDExtractGUI.jar, entered the IP address into the program, and made sure the port was set to 2002. I clicked "Test" to make sure SACD_Extract was communicating with the Sony, then I set it to rip to the DSF format so it would preserve the metadata. With the Sony still powered down, I inserted the USB drive into the front port. A few seconds later, the drawer opened on its own; I put the SACD in, and it closed automatically and the display turned off. I clicked "Run" on SACD_Extract and the magic started. Ripping the next disc just meant pressing eject, inserting the next candidate, closing the drawer, and powering the Sony down again before heading back to SACD_Extract.

Korg's AudioGate 4 program will play stereo DSF files, and it can convert them to FLAC, WAV, and several other formats via Menu - File - Export. You can also use programs like AudioGate or Audacity to record modern LPs and check for better-than-CD mastering. To view the frequency spectrum, convert a file to FLAC or WAV with at least an 88.2kHz sample rate, then drag and drop it into Spek, a free program from spek.cc. Happy ripping! **tas**