

the absolute sound

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DISPLAY UNTIL JUNE 20, 2023

16 Pages of New Music
Features and Reviews

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Technics SL-G700M2 CD/SACD Player and Streaming DAC

Technics has lavished its most advanced technologies on this single-box solution to digital playback. Anthony H. Cordesman explains why the SL-G700M2 is so compelling.

Equipment Report



Technics SL-G700M2 CD/SACD Player and Streaming DAC

Digital Evolution

Anthony H. Cordesman

This review is easy to write in one key respect: The Technics SL-G700M2 is an excellent sounding unit that combines a superior disc player and DAC with equally good streaming capability. It sells for some \$3500, so it is on the edge of today's higher-priced units, although high price is relative. Some other combinations of a DAC and disc player sell for over \$14,000; the SL-G700M2 is moderately priced by comparison.

At the same time, the sound of the SL-G700M2—like that of all the best current DACs—is superb. The sound quality of digital front ends is becoming steadily better. While the sonic nuances of given players can still be heard on most reference systems, they are often minor compared to the far greater sonic differences in other components like loudspeakers and those imposed by the listening room and position. That doesn't make such nuances unimportant, but it can mean that the real issue for a given audiophile and system is how well the nuances of a particular DAC blend in with the colorations in the rest of a system. As a result, the merits of the better digital players may be determined more by their synergy with a specific system than by the inherent differences in the sound of different players.

Having listened to a few DACs that have both digital and analog outputs, it is also clear that the nuances of an analog output stage are different from those of a digital output stage. Much of the coloration or sonic character of a given DAC seems to be the analog stage. Accordingly, this review focuses on the use of the SL-G700M2's analog outputs, and here the SL-G700M2 is outstanding for its price or well beyond it.

Listening Beyond Analog

The Technics unit is also typical of today's best DACs in that its sound quality is far better than that of the better DACs using technology that is now several years old—and far, far better than the sound of earlier digital players I'm all too aware that “digital” can be a dirty word for some audiophiles, and a second choice for others. I have at least some sympathy for such attitudes. I do still make use of my turntable and LPs. Old friends are well worth keeping, even if they do age over the years.

At the same time, I suspect that if you haven't made digital sound a key part of your system and listening habits, you either haven't really listened to just how much better digital sound has gotten over the last few years or you have assembled a mix of analog components whose colorations give you the music you want in the form you want it,

rather than seeking to get as accurate and objective a system as possible.

I have several audiophile friends whose system quality depends to a great degree on how well they have matched their phono cartridge—and in one case an analog tape deck—to their particular taste in sound, and to the character of their speaker and their particular listening room and listening conditions. The resulting synergy can be very good and deeply musically involving, although it can sometimes be a bit too personal and eccentric.

Analog can also impose some real limits on your musical options. Either you have to have a vast collection of analog recordings, or you have to ignore most of the recorded music now available. The issue isn't just sound quality; it is also how you approach the world of music, and how willing you are to settle for a limited range of performances and musical choices. Streaming has opened access to a vast range of music that has never been available before and that the better new players like the Technics SL-G700M2 do a far better job of reproducing than even the best players available several

Equipment Report Technics SL-G700M2 Network and CD/SACD Player

Specs & Pricing

Type: CD/SACD player and DAC with networking

Formats supported: CD, stereo SACD, DSD up to 5.6MHz, MQA, MQA-CD, WAV, FLAC, AIFF, ALAC, MP3, Chromecast, Google Assistant, Spotify Connect, Amazon Music, Deezer, Tidal, Qobuz, Internet Radio, Bluetooth, AirPlay2

Digital inputs: Coaxial (x1), TosLink optical (x1), USB-A (x2), USB-B (x1)

Analog output: Unbalanced on RCA jacks, balanced on XLR jacks (one stereo pair each), fixed or variable level

Digital outputs: Coaxial (x1), TosLink optical (x1)

Dimensions: 17" x 3.9" x 16.1"

Weight: 27.2 lbs.

Price: \$3499

TECHNICS (A brand name of hi-fi audio products owned by Panasonic Corporation)

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years back.

I should also stress that the Technics SL-G700M2 is typical of the better and best current DACs in that does a great job of demonstrating that the hardness of the early digital players has vanished, unless it is on the original recording. The sound of the upper midrange and treble on good recordings is much cleaner, although miking the performance too closely and using a mike with a bit too much upper-octave energy is characteristic of too many modern recordings and will still be more apparent.

The same is true of the soundstage. For most audiophiles, the listening room and the speakers do a great deal to determine the soundstage. No change in a given DAC or any other part of your front end can alter that fact. The soundstage on the recording is, however, still very important, and today's best DACs do make the musical details of the stage that are actually on the recording much clearer. The soundstage is more open, the imaging more precise, and depth is reproduced more naturally. Somewhat to my surprise, the lower midrange and upper bass of given instruments and voices are also sometimes warmer and better defined.

At the same time, I find that as digital players advance in sound quality, the value of higher sampling and frequency rates is less apparent. Nothing will ever make MP3 and AAC recordings compete for the best sound quality, but older 16-bit/44.1kHz and 16-bit/48kHz recordings now sound much better. Newer 16-bit/44.1kHz recordings also sound more competitive with higher bit and sampling rates.

This said, the best SACD and DSD recordings seem to sound consistently better than PCM recordings in direct proportion to how good, and often how recent, the player or DAC is. If you have the option, go for SACD or DSD version. (And incidental-

ly the Technics SL-G700M2 does a very good job of automatically selecting such options and clearly displaying the format it is decoding.)

The situation is different with streaming. I find the sound quality of the streaming services like Tidal and Qobuz does improve with the quality of the player, and usually improves more when you select the higher frequency and bit rates than it does with hard-disc storage. I also notice that using different computers can slightly alter the sound quality and reduce low-level background noise levels, which are generally very faint, although this can vary slightly with computer and/or service provider.

A lot of my friends disagree, but I usually prefer the sound of CDs, SACDs, and DSDs to that of the sound of the same performances played back from streaming service, although they too are often being updated in ways that improve their sound over time.

Features and Ergonomics

All these sonic improvements are audible with the Technics SL-G700M2, and I'll come to its sound quality shortly. I should, however, make it clear that its technology and ergonomics are equally well designed. It's easy to set up and use and equally easy to operate.

I am not a digital engineer and can't tell you just how far the technology in the Technics SL-G700M2 has advanced relative to its top competition in a world where new digital front ends keep emerging from so many manufacturers. I can tell you that this technology is audibly more advanced in today's

DACs and that Phillip's claim that the first CD players were "pure, perfect sound, forever" now seems to be a bit of a sick joke. Digital technology is improving in sound quality at rates where "forever" in digital terms seems to be becoming shorter and shorter in analog time.

I can also tell you that the Technics SL-G700M2 has made a number of technological advances over an earlier version of this unit, and some of these advances are ones being advertised by the manufacturers of more expensive units. Technics has a pretty good summary of these improvements on its website (us.technics.com/products/network-super-audio-cd-player-sl-g700m2). It cites these advances as follows:

- Dual ESS ES9026PRO DAC chips with symmetrical placement of one L/R unit on each side and independent transmission structures.
- The filter circuit after the D/A conversion uses an amplifier circuit with a unique discrete configuration instead of an operational amplifier (op-amp) IC.
- Coherent processing technology improves the reproducibility of impulse signals by minimizing amplitude and phase deviations that occur throughout the D/A conversion process for signals up to 192kHz PCM via proprietary digital signal processing.
- A Multi-Stage Silent Power Supply that provides noise suppression in three stages: (1) high-speed switching power supply, (2) low-noise regulator, and (3) current-injection, active noise-cancelling.

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- Current-injection active noise-canceling removes unwanted noise components by applying an inverse-phase current to the detected noise
- A new USB-B port that allows constant connection to a network audio server or PC for playback of high-resolution sound sources from the connected device.
- A “Pure Disc Playback” mode for Super Audio CD/CD playback. This model also supports MQA and is capable of full decoding playback of MQA files and MQA-CDs. Various other high-resolution formats are also supported, including WAV/AIFF, FLAC/ALAC, and DSD.
- The disc drive adopts a three-layer chassis configuration. Powerful vibration-damping and quiet construction, including a disc tray made of die-cast aluminum, ensure high-precision disc playback.

I can't tell you where this list places the Technics in the audio equivalent of a high-end technological arms race. I'm certain that any such ranking would be controversial, even if I were a digital engineer. Having read through the advertisements from other manufacturers of outstanding units, I can tell that other top units have similar lists. But if you're the kind of audiophile who's into bragging rights, I'd estimate no rival audiophile will know enough to challenge you over the list of advances in the Technics SL-G700M2.

Its ergonomics are also very good, and this is not true of many DACs. The Technics SL-G700M2 is unusually compact for a unit with all its functions, but it is very well built and notably heavy for its size. The front panel is unusually readable and informative. The remote, which also works on a matching Technics amp, is well labeled and works well at a distance. The disc tray is reliable

and smooth, and the DAC has Chromecast to improve the ability to use streaming services. Rear connections are also clearly labeled, and the instruction manual is well designed. My only complaint, and this applies to virtually all DACs, is that the instructions are weak in helping to set it up for given streaming services. (A complaint that applies equally to most streaming services, which tend to assume you have a very simple home-computer setup.)

Sound Quality

I've already talked about most of the sonic advances you should expect from a modern digital front at this price level, and I heard them all from the Technics SL-G700M2. I really did enjoy listening to this unit. Like other the top-quality digital products I've auditioned recently, there were no sonic anomalies or areas where I heard a problem with its reproduction of recordings.

It also did very well for its price. It did not perfectly match the sound quality of a two-piece digital front end costing nearly four times as much, but the sonic differences between the SL-G700M2 and that new top-quality DAC were limited and audible only on the best recordings. They consisted of minor differences in low-level resolution and in soundstage width and depth. Many were also debatable in the sense that my judgments were a matter of personal taste. I had to listen long and carefully to hear such differences, and I suspect that they would seem very minor to any audiophiles comparing them to the sonic differences in phono cartridges or speakers.

It was also interesting

to move the Technics SL-G700M2 around to listen in the different audio systems and listening rooms of my friends. Not only were the differences between the sound of the SL-G700M2 and other more expensive rivals relatively small, but it was also clear that the sonic nuances from the different speakers, listening rooms, and choices in music and recordings did far more to impose a sound character on the system the different digital players did. That's damn good performance from the Technics SL-G700M2 for what was sometimes a \$10,000 difference in price.

Summary Judgement

Highly recommended, this Technics unit makes it clear that we have to take the Japanese high end very seriously. The SL-G700M2 is also the kind of unit that might change the mind of even fanatic believers in analog; it is certainly one that every audiophile who has a digital front end that is several years old should audition. It makes it clear that there have been real advances in sound quality in recent years, ones you can really enjoy.

But as is the case with every component, make your choice a quest by listening to a range of such units at a friendly dealership. Listen to other expensive units with SACDs you really know, where you can objectively evaluate the sound of different front ends, even the ones you now believe you can't afford. After all, an audio aristocrat like you doesn't go fox hunting by reading the sports section and then asking Amazon to deliver the best-reviewed fox. (Well, hopefully!) **tas**

