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World Premiere!

Hegel Music System HD10 DAC

A high-end digital to analog converter from Norway that rocks!

Review By Anthony Nicosia

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Hegel Music Systems just last year (2009) launched its product line into the US market after a twenty year plus run in Europe. This high-end audio company had its beginnings in Norway starting in 1988 within the beautiful city of Oslo. Oslo is quite the well rounded cultural center and a natural place for the likes of a company like Hegel in which to thrive. It is the home of the beautiful Rockefeller Music Hall (A large music and entertainment complex in downtown Oslo), the National Theater, The Royal Palace and the Nuevo Palacio De La Opera (A uniquely designed building with a roof you can actually walk upon). Why even the Nobel Peace Center is located in Oslo as well as many beautiful parks, historic buildings and places of cultural interest. The original founder and still head of Hegel is Bent Holter, while Ben Gosvig heads up the United States market distribution center based out of Fairfield Iowa in the US. The company is well known for their patented SoundEngine circuit technology, an error canceling system, designed to cancel crossover distortion in class AB amplifiers. It is this technology that leads them to believe they have a distinct advantage in today's market place by being able to get better sound with "off-the-shelf" components than their competitors using more expensive products. "Basically you can say that we offer caviar for the price of a sausage." Today though we will be visiting their new HD10 DAC (digital to analog converter) with its USB technology making it a good match not just for quality CD players but that growing group of audiophiles who incorporate their audio systems with modern computer technology.



Basic Information

The people at Hegel proudly boast about offering a minimalist industrial design that is easy to operate. Looking at the HD10 one can readily see that their compact physical size should easily fit into most home environments. Right away this was seen as a big plus with me as my Salamander Audio Rack is always jam packed with various equipment. I normally keep two mono block and one integrated amplifier on hand as well as a turntable, a phono stage that is divided into two separate pieces, one or sometimes two CD players, an assortment of "tools" for my analog setup as well as extra isolation devices. So you see a DAC about one half the width of a CD player is immediately a welcomed addition. The HD10 comes in black and on the front faceplate the name Hegel is prominently displayed with a knob below it for switching between different sources. They sources are simply labeled Coax1, Coax2, Optical and USB and correspond to the matching inputs on the back panel. On this rear panel is also located a fuse holder, an IEC connector and two outputs for RCA and XLR cables. To the delight of some of you the HD10 is actually a true electronically balanced design and can be used as such. With all these options you can use your HD10 for a large variety of purposes. The following is a quote from the website explaining just a little more about what the HD10 is actually capable of doing.



"The USB connector found on Hegel amplifiers and digital to analogue converters opens a whole new world for music and movie lovers. This functionality allows you to easily connect your Hegel product to any computer with a reasonably new Windows or Mac OS operating system installed. The most common Linux systems will also work."

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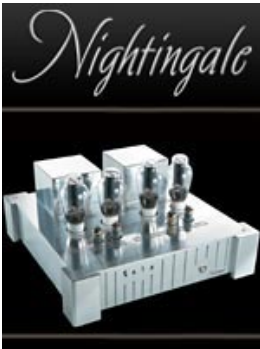
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For as you see, Hegel's new USB technology is accessed through the USB port, is in reality a built in computer sound card. The Hegel USB DAC is capable of playing high resolution 24-bit/96kHz signals from your computer resulting in some very high quality music, assuming of course that you have equally capable loudspeakers. It will play any file your computer can play. One particularly nice feature is that you do not have to download or install any programs (no updates either) as all that is required of you is to connect the HD10 to your computer with the appropriate cable. If you no longer want to use it then just disconnect the cable and the computer returns to normal operation. The HD10 will actually install its sound card automatically as a "generic sound card" and thus there are no drivers to install. Just imagine yourself listening to the Internet Radio, hearing music from various sources, playing video games and listening to downloaded movies on your computer all through this new high-end DAC from Hegel. With the coaxial and optical connections you can also seek to improve the sound quality from your cable-TV decoder, satellite receiver, CD-player or another device with a digital PCM output. Looking within their website you will find instructions on how to connect it to your iPod plus a variety of other uses listed as well. As for upgrading the sound of CD players it houses a high resolution 24-bit/192kHz D/A-Converter which Hegel has labeled "Full-HD sound". One of my projects for this year will be to actually upgrade my computer to something capable of playing high-end music through and it looks like the HD10 would be a good match. In order to access the high resolution sound, without a specific driver, your computer must have either coaxial or optical digital outputs.

Finding A Home Within My Home Theater

Using the optical out of my Sony PlayStation3 the sound from Blu-ray movies can now be accessed and redirected through the HD10. From there it goes into my multi-channel Marantz receiver to play back through my 5.1 channel home theater setup via a pair of RCA cables. All video outputs are passed through a separate HDMI cable directly linked to a JVC projector capable of displaying it in 1080p format on my 118-inch diagonal permanently mounted widescreen. While watching *The Dark Night* (WB Blu-ray Disc) using my favorite scene in which the Joker blows up the hospital it was quite apparent that the HD10 improved upon its sound effects. When the multiple explosions occurred one could more clearly hear the sounds made by the debris from the buildings as it fell upon the pavement. Where before it sounded muffled, by comparison the explosion itself I now could hear a more detailed event with the sound of glass breaking plus the building itself collapsing from the force of the bombs. Borrowing my older sons *Star Trek* [Spyglass 07182] Blu-ray disc the results were quite similar. The sound of glasses clinking together, footfalls on metal surfaces from actors as they walked throughout the spacecraft and the power of thrusters from spaceships as they moved throughout space were all more audible and took on much greater detail when heard with the aid of the HD10. As the movie soundtrack played I found myself thinking that this little unit was doing the job it was designed for and meeting all my expectations without a hitch. By cleaning up the soundtrack it actually made passages somewhat quieter, unless you turned the volume up a notch or two to compensate for this, as I did. You now heard more of what you should rather than extra "noise" from the playback material. What you were hearing though was a more pure and detailed sound with a presence closer to live events that in turn added an extra dimension of realism to my home theater experience.



A Powerful Presence In My Two Channel Review System

Now for the much anticipated stroll over to my two channel review system to connect, by way of a digital cable, the OPPO Digital BDP-83 CD player to the HD10 and then into my preamplifier via a pair of RCA cables. There are some truly great songs on Michael Jacksons *Dangerous* [Special Edition Epic EK 66071] CD and one of them is "Black or White" Now while the OPPO BDP-83 is a fine player in its own right the HD10 took it up to another whole other level entirely. In the opening moments of the song there is a young boy listening to music as his father is banging on the door to get him to turn down the volume a bit. Played at just the right sound level it almost made me believe someone was banging on a door right in front of me. Rather than a more subdued lower level knocking the HD10 gave it a more robust authoritative sounding tone to it. After breaking into the actual song the HD10 displayed the quick pace to the music that was indicative of what the performance was all about and it also opening up the front to back sound stage just a bit. The song that truly opened my eyes, to the HD10's ability to lay out an expansive soundstage, was "Will You Be There". Here the opening voices of the singers were given a realistic presentation of height within the choir. There was a definite three-dimensional sound quality and a clear layering effect within that choir giving the performance a true hall type of effect. Then all of a sudden we are hit with some mid bass presence and the powerful yet clear voice of Michael Jackson opening up yet another musical aspect within the song. No matter what was thrown at it the Hegel HD10 gave me all I could hope for and then some. Next up was something I like to put on when visitors come over as I ask them to guess who the singer is. Rarely does someone give me the correct answer as Michael Jackson sings "Gone To Soon". Here his voice sounds at its best in a song that is quite sentimental in mood while displaying his full vocal talents. I usually listen to this with my 8-watt 300B tube mono block amplifiers but today did so with the Monarchy Audio SM70-Pro Class A Solid-State Amplifier. You know what though, the HD10 gave my 300B tubes a run for their money as they added a nice analog touch to the recording with their ability to increase soundstage presence left to right and front to back. The HD10 presented the emotional content of





the song with a beauty that made one want to sit there listening to music throughout the night. Long late night listening sessions are what I usually reserve for playing records with on my turntable. Yet now, due to a lessening of digital fatigue thanks to the addition of the HD10, longer late night sessions with my CD collection was also a pleasure.

Hidden within the *Sleepless In Seattle Original Motion Picture Soundtrack* [Epic SoundtraxEK 53764] CD are many famous singers and great songs. Not only does the movie seem destined to become a classic but the songs already are. "When I Fall In Love" performed by Celine Dion and Clive Griffin is certainly quite a contrast in styles and vocals. Here we have the powerful auditorium filling voice of Celine Dion in a duet with the softer spoken Clive Griffin exhibiting a small jazz club sound. Leave it to the HD10 though to differentiate between the two as the larger voice did not overpower the softer one. Within this duet layering of voices was nicely portrayed and quite distinctly evident, not an easy task for some CD players. "A Kiss To Build A Dream On" performed by Louis Armstrong shared with us the uniquely wonderful raspy singing voice of Mr. Armstrong. Here the great Satchmo, as he was often called, gives us a taste of his talented trumpet playing as well. Horns and violins can either sound great or can kill the musical event, depending on the playback system as a whole. With the HD10, the timbre of the trumpet took on a more solid tone rather than a thinner sounding effect making it a joy to hear. It just seems like this CD has one incredible performance after another as next up was the selection, "Stardust" performed by Nat King Cole. It would be a crime to mess with the voice of the incomparable Nat King Cole but do not worry the HD10 did him true justice. Adding the right amount of air around his voice and a good decay of vocal content everything came across just fine. The sound of the orchestra in the background was layered properly in combination with Mr. Cole's singing so that even his clear strong voice did not overshadow but rather complimented their performance.

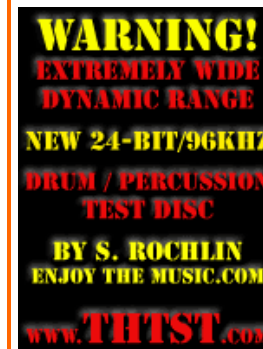
It felt good to turn up the volume and listen to this magical event as the HD10 did a great job of placing his voice out in front so as to hear it quite clearly. No it was not too forward sounding but rather just had a nice added bit of presence to it. The ability to combine a top notch layering effects as well as displaying the strong emotional content of the singer was again evident with the song "Bye Bye Blackbird" performed by Joe Cocker. Anyone who knows of Joe Cocker's singing ability and style understands the intense effort he puts forth with each song and how clearly important it is to the development of that piece. Not only do you get to hear the details of his distinctive singing but this voice is not lost when the entire band and background singers join in. The HD10 was able to distinguish each individual instrument and voice to create its own separate soundstage presence. This went a long way toward making complex musical passages more distinct and clear. Before saying farewell to this CD it is important to note one more song, "A Wink and A Smile" performed by Harry Connick Junior. Mr. Connick is quite talented as he is not only a singer, composer and pianist but an actor as well. The Hegel HD10 gives us a very decent portrayal of the sound of his piano as it comes across lifelike in size extending well back into the soundstage. Not only that but it also exhibits a good width left to right bringing this pianos three dimensional image into focus. All this is no an easy thing to do yet it is pulled off very nicely by the HD10.

Final Notes

As one can tell the Hegel HD10 is a very impressive product from this company out of Oslo Norway. While I have yet to hear the rest of their lineup it seems almost certain that their least expensive foray into the high-end market, with the HD10 DAC, is going to make a big splash here in the US as well as abroad. Not only did I use the HD10 with the OPPO Digital BDP-83 but also with my Sony DVP-S7000 DVD player and my Samsung HD-841 CD/SACD/DVD Audio universal player. It went a long ways to improve upon the sound of both of those older units but took an even greater step forward when paired with the newer designed OPPO player. Here the HD10 sparkled as it lifted my digital playback system to another level altogether where it rivaled even my analog setup as it impressed me with its lack of digital grunge. So whether you would like to hold onto some older CD players to be used as transports or are ready to move up to more modern CD transports/players the new Hegel HD10 just might be the ticket for you. It was also versatile being able to fit into two channel and home theater setups and could even be used with computers. For \$1200 this DAC from Norway dazzled me with its audio capabilities bringing out the best of any associated equipment I chose to pair it with. Do yourself a favor go to their website and see out what other audio treasures might be lurking there. I know that after my experience with the HD10 , I intent to find out more about this company from Norway that has been quietly hiding in Europe for the past twenty some years. Let me gladly say "Welcome to America".

The Listening Environment

The review room is eighteen feet eight inches long by thirteen feet wide with the loudspeakers and equipment kept on the short wall. The cathedral ceiling starts at eight feet and slops up-wards to thirteen feet at its peak in the middle spanning across the short length of the room for the full thirteen feet width. The hardwood floor has a nine by six foot oriental rug lying down the long ways facing toward the system placed dead center in between, yet not under, the listener and the review equipment The room has no doors but there are two









openings. One opening is in front of the right loudspeaker giving access to the hallway while the other is behind the listening position which opens to a formal dining area. The room is treated with three floor standing acoustical panels, one behind each loudspeaker and one in front of the fireplace (although I have been known to move them), while all audio equipment is located in a Cherry Synergy Twin S30 Salamander audio rack against and in the middle of the short wall. I have two power conditioners which plug into a PS Audio Power Port receptacle located behind the audio rack. I also use two Blue Circle Audio MKIII Power Line Pillows one on each of two outlets on the long walls next to and behind each loudspeaker. The loudspeakers are located about six feet seven inches from the rear wall measured to their front panel and twenty one inches from the rooms side walls to the middle of their front panels. The loudspeakers are placed twelve feet apart forming a triangle with the listening position that is also angled at twelve feet from the center of the front of each loudspeaker to the center of the listening position. In the corner of each short wall behind them are a pair of Klipsch Klipschorn loudspeakers which are also sometimes used when reviewing audio gear. If the Klipsch loudspeakers are in use I would then reposition the three acoustical panels to slightly behind the listening position one to the left, the other to the right with the third being placed in the opening leading to the hallway just right of the right loudspeaker.

Review Equipment

Placette Passive Preamplifier
 Monarchy Audio SM70-Pro Class A Amplifiers
 OPPO Digital BDP-83 Blu-Ray Disc Player with SACD and DVD-Audio/Video
 Samsung HD-841 CD/SACD/DVD Audio universal player
 Sony DVP-S7000 DVD player
 Acoustic Revive RPT-2 Ultimate Power Distributor
 Audience aR2p-T power conditioner
 Two Blue Circle Audio Mk III power line conditioners
 Interconnects: PS Audio xStream Resolution Transcendent cables
 Loudspeaker cables: Acoustic Revive SPC-PA with Kimber Kable 4TC jumper cables
 Power Cords: Tek Line PC-8 Signature (2), Monarchy Audio AC-1 (2)
 Cherry Synergy Twin S30 Salamander audio rack

My Ratings

Please take into consideration that the equipment under review is being measured in my room, with my equipment and heard through my ears. As always you should be the final judge as to what works for you in your environment and measured against what traits you value most. The following was how I rated the equipment based on a rating system that does not take in to consideration the cost of the product, until the very last question, "Value For The Money". Before that all products are rated against others in its category, regardless of financial considerations with a highest rating of 5.

Tonality	
Sub-bass (10Hz - 60Hz)	
Mid-bass (80Hz - 200Hz)	
Midrange (200Hz - 3,000Hz)	
High Frequencies (3,000Hz On Up)	
Attack	

Decay	
Inner Resolution	
Soundscape Width Front	
Soundscape Width Rear	
Soundscape Depth Behind Speakers	
Soundscape Extension Into Room	
Imaging	
Fit And Finish	
Self Noise	
Value For The Money	

Specifications

Type: Digital to analog converter

Digital Inputs: Two coaxial, one optical and one USB sound card

Line Inputs: Pair of XLR balanced and pair of RCA unbalanced

Frequency Response: 0 Hz to 50 kHz

Phase Response: Linear Phase Analog Filter

Noise Floor: Minus 140dB

Distortion: Less than 0.001%

Power Supply: Built-in toroidal transformer, 30,000 uF capacitors

Dimensions: 6 x 21 x 26 9HxWxD in cm)

Weight: 6.25 lbs.

Finish: Black or Silver

Price: \$1200

Company Information

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