

The Electrocompaniet ECD1 DAC

STEREO TIMES – USA

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3 March 2003

Specifications

Single ended gain: 1.6X (4dB)
Balanced gain: 3.2X (10dB)
THD: (1V out, 1KHz) < 0,002%
Maximum output: (Balanced) > 14V RMS
Channel separation:(1Vout,1kHz)>90 dB
Equivalent input noise: 4µV
Dimensions: 19' (w) × 10 '(D) 3.2' (h)
Weight: 11 lbs.
Price: \$2000



US Distributor: Jason Scott Distributing.
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Website: www.Electrocompaniet.com

Over the past several months, I've had the opportunity to experiment with many different audio components. Mostly, I listened to different speakers and amplifiers, and made many cabling changes. The changes I made affected the final sound, but none of the changes truly gave me the openness and detail and clarity that I was trying to find. I felt like I reached a point where I could tell something was holding back, something was still missing, but I was not sure just what it was. As I contemplated my next change, Clement Perry had just completed his review of the **Electrocompaniet EMC1 CD Player**. The timing of his review was perfect; Clement's bold statements about how great the EMC1 had really peaked my interests and made me realize that my next step was to evaluate a change in my digital source. After doing some research and speaking with Clement, I knew that trying the Electrocompaniet ECD1 was the next step in the progression of my system.

The ECD1 is a 24-bit/192 kHz upsampling DAC that incorporates the same conversion technology as the upgraded EMC1 CD Player, obviously without the transport functionality, and costs \$3000 less. For those already possessing a transport or CD player with a digital output, the ECD1 is an excellent choice. Regardless of the input signal type (16 - 24-bit is supported), the ECD1 will upsample the source to 24-bit resolution with a sampling frequency of 192 kHz. The increased resolution provides a much greater level of detail with less noise than traditional (non-upsampling) CD players and DACs. In addition to the 24-bit/192 kHz D/A conversion process, the ECD1 utilizes a completely balanced class-A design for each channel that is responsible for a high level of digital noise cancellation.

The DAC is housed in a simple and elegant chassis similar to other Electrocompaniet products. The face has two buttons, one for power and another to select the input source. Typical of many DACs, the ECD1 does not have user selectable modes to set or disable the upsampling rate nor does it have any visual indicators for the input signal type or to verify that a signal is present. The input section of the ECD1 can support up to four input sources: 1 XLR (AES/EBU), 2 RCA (S/PDIF) and 1 Optical (Toslink). The original digital input signal can be passed back through the ECD1's two digital outputs, 1 optical and 1 Toslink. The digital output feature provides flexibility and support for different configurations. The analogue output section provides support for both balanced (XLR) and single-ended (RCA) equipment.

The moment I connected the ECD1 to my system I found the missing link I had been searching for. I was able to take this DAC right out of the box, plug it in and hear the difference. As I sat and listened to standard 16-bit/44 kHz CDs, there was suddenly a level of clarity and detail that I had not heard before. The soundstage was deep and wide and there was a real sense of space and dimension. A completely three-dimensional sound filled the room with amazing detail and imaging. It was very easy to hear that the ECD1 was able to resolve the slightest ambient information from the source. The high frequency presence was fluid and smooth, not because it was made brighter, but because the detail was resolved and not cancelled as noise. As I listened to John Coltrane's *SoulTrane* [Prestige OJCCD-021-2], each tap on the cymbal was crisp and clear. You could actually hear the drumstick strike the cymbal and the sound was heard clearly as it faded away with detail before the next strike. And of course, Coltrane's tenor saxophone was amazing, truly natural sounding with incredible dynamics. Once again, all the details were present, right down to Coltrane's breath as it escaped through the saxophone. I truly could not believe that this was the same 16-bit/44 kHz disc of a 1958 recording.

The result of the ECD1 on 16-bit/44 kHz sources was truly stunning detail, dynamics, imaging and soundstage. So imagine my surprise when I started listening to 20-bit remastered recordings. The ECD1 was able to resolve the 20-bit version of Sonny Rollins' *Tenor Madness* [Prestige PRCD 7047-2], with amazing detail. This recoding utilizes the JVC K2 Super Coding system that resolves 20-bit sources down to the 16-bit CD format without losing the low level information. The benefit of this technology is that it provides the listener with much more detail, especially the subtle details often missed. Well, the ECD1 is able to take advantage of this technology with it's extraordinary digital to analogue capabilities. Each instrument can be clearly identified and localized within a wide soundstage, as if the ECD1 can resolve all the instruments independently and put them together without losing a single nuance of information. I found myself not only listening to the individual songs as a whole, but I was able to really focus on specific instrument detail, especially percussion instruments that are sometimes lost during the digital to analogue conversion process. With each piano key Red Garland played, you could hear and sense the impact of the hammer on the string. And, although the bass is set deep in the stage, it is not lost behind Rollins' saxophone, with each pluck of the strings clearly heard.

The 24-bit /96 kHz remastered version of The Doors *L.A. Woman* [Elektra 75011-2], demonstrates the ECD1's versatility across different genres of music. The entire disc exhibits clarity and dynamics, with the electric instruments and drums never blending together to produce a bright or harsh sound. When listening to "Riders On The Storm," the background sound of the rain was constantly present and clearly distinguishable, not lost as noise, once again revealing how the ECD1 can resolve low level detail if it exists. The organ in this song is very holographic, with the notes seeming to fall from the sky and gently fade away. I found listening to this version of *L.A. Woman* more enjoyable than the DVD-A, which at times sounds very unnatural as instruments and voices move across the soundstage.

I have had this unit in my system for several months now and I truly believe that this unit is responsible for a level of transparency and clarity that my system did not have previously and provides the performance and sound quality of DACs costing much more. But you needn't take my word for it. I strongly recommend listening to this unit because hearing is believing. I was so impressed by the sound of the ECD1 that I purchased the unit and it is now a base component in my system.

