

GET CONNECTED!

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It's Not What You're Plugged Into, It's WHO You're Plugged Into!

With broadcasters and other professionals still straddling the fence over what equipment they currently own and what gear they're buying for the future, what tools they'll need to repurpose/digitize existing assets, and not willing to compromise on quality at any point, look no further. Convergent Design's new SD-Connect converter device is a godsend for broadcasters, editors, or anyone else in need of connecting a wide variety of cameras, decks, or audio gear to a variety of NLE applications, or for those needing to convert analog to digital.

This box accepts DV, DVCPRO, SDI, NTSC, PAL, component, composite, Y/C, balanced audio, and unbalanced audio all on input. It is network-ready, and has firmware upgrades available over the web.

Housed in a rack-mountable sturdy studio-type box, this device can become the centerpiece of any non-hardware specific NLE package. The front panel is fairly simple, providing only a power button, 10 line LCD display, and a data control knob. Setup functions for the device, as well as patch bay-like routing are all managed from this display and the corresponding data control knob.



Built for Speed!

Without even cracking open the reasonably thin owners manual, I was able to capture with this device within moments of opening the box. (in the box you get an owners manual and power cable) That's because the menu options are very well laid out. The first line displayed when the unit is powered up is the SETUP dialog, in which the overall system setup is set to user preference. For instance, here you'll determine the direction of information flow, whether it's incoming or outgoing. This tells the SD-Connect whether to encode or decode information incoming or outgoing. Incoming data is decoded and sent to all video and audio outputs. Of course, this is related to the SD-Connect functioning in Stand Alone mode. When you have told SD-Connect which application you want to work with, the application itself will tell the SD-Connect how to function and what mode it should be in.

In this same setup dialog, NLE applications are specified. Currently the SD-Connect is connected to:

- **Apple Final Cut Pro**
- **Avid Express PC**
- **Avid Express Mac**
- **Premiere Pro**
- **Sony Vegas**



It also functions as an extension of a camera or deck that may be connected to it with no computer as part of the process. However, you'll have to manually switch between capture and playback modes, depending on how you wish to route video.

Finally, the unit has a Stand Alone mode that allows SD connect to generate test patterns and test audio for setup. This mode is predominantly for conversions of formats without using an NLE an intercessor to the process.

During the playback/capture processes, SC-Connect will display either simulated timecode or will display timecode derived from any connected tape machine.

Take Control!

For those that have tape machines that require control via the RS 422 protocol, the SD-Connect will operate the deck, receiving 1394 information from the NLE/capture tool, and sending out corresponding control information via 422. The Convergent Design SD-Connect device also allows you to turn off deck control so that you might retain manual control of a deck. Perhaps you'll be

using a consumer-oriented deck that doesn't pass or read timecode? The SD-Connect can create timecode on the fly in those situations.

SD-Connect also offers users the opportunity to send blackburst over the Y/C output, however you'll need a special cable to do this, splitting the Y component out to be sent to an analog device for sync.

Another nice feature in this same section offers users the ability to seamlessly switch between PAL, NTSC, and NTSC-J. (no pedestal)

SD Connect also will accept up to 4 channels of audio simultaneously. The balanced audio connectors are standard connectors, firmly mounted in the chassis of the box. Channel One of the input section of the SD-Connect is a dual input connector, allowing for a 1/4" connector or an XLR connector. Why Convergent Design didn't do this with both channels One and Two is unknown, as this relatively small cost would make the unit more flexible on the input side. Either way, this is a handy feature to have.

The SD Connect also generates audio test tones for setup. Currently the video test patterns are limited to color bars, but Convergent Design has announced at least another 20 test pattern options in the near future.

Process THIS!



The SD-Connect also provides users with a proc amp built in. This allows you to color balance on input during capture, potentially saving hours in the post process. Controls include Luma Offset, Luma Gain, Chroma Phase, and Chroma Gain. Since the video and audio outputs on the device are always hot, you can monitor the changes on your broadcast monitor. This should save hours of correction time in post if the analog signal is corrected prior to capture. There is a reset switch in the system that allows the processing amp to be reset to default/zero points, assuring users that the video signal is untouched during less sensitive capture instances.

Not Enough Caffeine Mode

Ok, so that's not what Convergent Design calls it, but when working with reference sources, this device will seek the external reference signal from the Analog Video input connection. If the signal isn't present, SD-Connect will notify you if it's using the External or Internal reference source. The device also informs you when no deck is present on the system, or when no video is coming down the 1394 input. On restart or initialization of the device, if there is missing signal, SD-Connect will provide you the opportunity to reset to the internal reference clock. So, in those late night moments when you've forgotten to turn on a deck or external clock device, you'll be informed.

SD-Connect will also inform you if a tape is write-protected or not rewound to the beginning, or when there is no tape in the deck. It will also let you know when analog video is unlocked, or rather that SC-Connect can't resolve to the incoming video signal.

Web-Friendly

The SD-Connect is capable of contacting the Convergent Designs website for software updates to the device. This can be done with DHCP (Dynamic Host Configuration Protocol) or static IP addressing that you may set in the display window of the SD-Connect device. The box will connect to the web via your system when you want it to, and download any updates.

UPDATES!

According to Convergent Designs, they'll soon be able to offer uncompressed 10 bit video and 24 bit analog audio over Firewire! Directly from the Convergent Design website;

SD-Connect will support uncompressed 8-bit / 10-bit video, 4-channel 24-bit audio and time code over 1394 via an upcoming firmware upgrade and installation of appropriate drivers. Support for Adobe Premiere Pro is planned for 4th quarter 2004, with Apple Final Cut Pro to follow the next quarter. One can only hope they make this accessible to Sony Vegas soon as well. They've also announced web-based control of the device, although I'm not sure where that would logically fit in to most workflows. Personally, I find it no problem to set the proc amp and other settings manually, but you'll soon be able to accomplish this via your web browser.

Final Render:

All in all, it's pretty evident that Convergent Designs have planned the SD-Connect with broadcasters and other professionals in mind. They've also clearly got an eye for the future and other formats with the upgrade tools built in and announcements that make it clear that they're far from done with this product.

At a retail price of \$1495.00, it's equally clear that these guys are poised to make some major inroads in the broadcast and professional video market. Seems to me that while there's a new kid in town, and he's also the one that everybody is gonna want to hang with.

Strengths: Rack Mount, updateable, every type of connect needed, supports NTSC and PAL formats, offers 422 deck control via 1394 from selected NLE applications. Great price.

Weaknesses: No TBC, Only one audio channel with 1/4" connector

Happy Editing!

SPOT



4.5 Videogeeks

Outstanding: Rack Mount, updateable, every type of connect needed, supports NTSC and PAL formats, offers 422 deck control via 1394 from selected NLE applications. Great price.

Could be better: No TBC, Only one audio channel with 1/4" connector.

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