

# Osprey-500 DV Pro and Osprey-200

Score: 3.5 ◆◆◆▲

## Pros

Intuitive setup and installation. Easy to use. Straightforward solutions for Webcasting.

## Cons

The Osprey-200 isn't high enough quality to qualify as a general-purpose capture card. Although the Osprey-500 DV Pro offers better quality than the Osprey-200, it requires exclusive use with the Windows Media Encoder.

## Bottom Line

Both cards are a good solution if your requirements are to stream Web video. The 200 is a solid bang for your buck. The 500, on the other hand, provides much better quality audio and improved video, albeit for a price.

## System Requirements

Windows 95, 98, Me, 2000, or NT 4.0 (Osprey-500 DV Pro supports NT and 2000 only); Pentium PC with PCI bus and one free PCI slot; 16MB free memory; 16-bit graphics card supporting Direct Draw.

BY CHRIS MANNERS

- Viewcast, \$2495 (for the 500 DV Pro); \$179 (for the 200)
- Video Capture and Webcast Cards



The Osprey line of cards from ViewCast has been the de facto standard for live Webcasts for a while. Originally designed as consumer-priced videoconferencing cards, the cards were quickly adapted for Webcasting when Internet broadcasting became viable. The company continues to focus on the needs of Webcasters, and offers a wide variety of capture cards.

## The Osprey-200

The Osprey-200 is a half-length PCI card that installs quite easily on both a 2U server box and in a standard desktop machine. The back

of the card has only one composite (RCA) and one S-Video connector for video. The S-Video connector is slightly recessed, and the thick casing around the end of some S-Video cables may keep it from being able to make a secure-enough connection to transmit a video signal. However, the time-honored fallback of substituting a Mac ADB cable works fine (although you will want to use a professional-quality cable for broadcasting a real event). The card captures video at sizes up to 640x480 at a frame rate of 30fps, and it can integrate with any Direct Draw application, including Adobe Premiere,

**The Osprey-200 is a half-length PCI card with composite and S-Video connectors, and unbalanced RCA jacks for audio.**

Microsoft NetMeeting, and White Pine CU-See-Me.

The Osprey-200 supports 8-bit and 16-bit audio at 44kHz, 22.05kHz, 11.025kHz, 16kHz, and 8kHz sampling rates. However, the Osprey-200 only has unbalanced RCA jacks for audio. ►



image to come!

The Osprey-500 comes in three flavors, including the 500 DV Pro (pictured), which includes balanced/unbalanced audio, 1394, and SDI connectors.

Unbalanced audio can be a problem for computer-based capture, as computers themselves can create serious audio leaks and RF noise. Fortunately, Viewcast has announced the Osprey-220, which includes balanced inputs in a breakout box.

## Osprey-500 DV Pro

The Osprey-500 comes in three flavors: the 500 Pro, 500 DV, and the 500 DV Pro. All flavors have balanced and unbalanced audio, composite, and S-Video inputs. SDI, RCA, and optical connectors for S/PDIF digital audio

are available on the Pro and DV Pro models. The 500 DV Pro adds an IEEE 1394 (aka FireWire or i.Link) connector and enables realtime streaming from a DV source via a built-in DV decoder. The 500 DV Pro combines the features of both the Pro and DV versions of the 500, but I only tested the 500 DV Pro. All three are optimized to work exclusively with the Windows Media Encoder. The hardware is specifically locked, so the cards won't work with other DirectShow-compliant capture software such as Adobe Premiere. Microsoft contributed engineering to the development of the card, and its licensing deal required the lockout. The lockout on the card I tested, however, didn't appear to be fully functional. It's possible to encode RealVideo with the card—it just doesn't recognize video input via FireWire, but S-Video input works well. Nonetheless, it isn't possible to use the 500

DV Pro for more general, uncompressed video capture.

The analog connections—BNC composite, S-Video, and balanced and unbalanced audio—are provided via a breakout box. The right balanced audio connector also can serve as an AES/EBU connector. The breakout box is especially useful by making it possible to shield the RF noise of the computer by virtue of distance. The board itself includes DV and SDI video inputs, and optical and S/PDIF Coax digital audio connectors. Using the latter onboard audio connectors naturally eliminates the RF noise concern. One drawback is the lack of a component analog input, but there are a number of good (if expensive) component analog-to-SDI transcoders available.

Both Osprey cards I tested handle on-board scaling, cropping, and deinterlacing, as well as a few image processing functions. As a bonus, they can also output the video signal

in a specific color space, saving a smidgen of quality and a fair amount of CPU time by avoiding an unneeded software color space conversion. This works well with both Windows Media and RealProducer Plus using the native 4:2:0 color space (labeled as YUV12 in the Osprey interface) of their respective codecs.

The Osprey-200 ships with RealSystem Producer 8.5, Windows Media Encoder, and Osprey drivers. The 500 ships with Windows Media Encoder, Osprey drivers, and Windows Media Player. The Osprey-200 shows up as a standard audio and video capture device to any software that supports the DirectShow architecture. For Webcasting, this software is generally the Windows Media Encoder from Microsoft or RealProducer from RealNetworks. I didn't have any difficulty using the Osprey-200 with either piece of software—the experience was exactly like using any other capture device. As I mentioned before, the Osprey-500 is designed to work only with Windows Media. The one bit of custom software is a configuration dialog accessed from within the standard DirectShow configuration interface, which has some basic controls for adjusting contrast, brightness, hue, and so forth.

## Community divided

There's a little disagreement in the professional video community about using cards designed for live broadcast for video-on-demand (VOD) applications. Some pros contend that for VOD-distributed content (the dominant format on the Internet), offline encoding provides better bang for the bit than a live-encoding solution. The argument contends that although the speed of live encoding is compelling, ▶

## REVIEWS OSPREY-500 DV PRO AND OSPREY-200

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the reason it's so much faster than offline encoding is that offline encoding spends more CPU cycles to improve the quality of the video. For example, two-pass/variable bitrate encoding (supported by RealVideo, the new Windows Media 8, and Sorenson Video

for progressive download) analyzes the entire clip first and then determines how to distribute the bit budget most efficiently over the file. This results in substantially better quality at any given bitrate. Because it requires a second pass through the material,

it obviously can't work with live encoding.

Other pros contend that there's little real difference between these two types of video, and argue that the Osprey cards are perfectly good solutions for capturing VOD content. Generally

speaking, though, the quality of video compressed by a tool such as Media 100 Cleaner can be much higher—with VOD content, developers have a lot more time to tune the compression parameters. In the end, though, this is purely an aesthetic decision. What video producers determine to be acceptable can vary widely.

That said, it's clear these cards will remain at the forefront of the options for streaming video in realtime. If you're planning to create live Webcasts, these solutions are great. ■

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