

Avid Media Composer 6 and Matrox 4VANC on Mac OSX

For Avid MC6 users on Mac who need to add closed captioning and other VANC data, there is now a new solution in place using the Matrox MXO2 and Mojito hardware I/O.

The Matrox MXO2 and Mojito hardware feature SDI and analog I/O which support closed captioning data in Mac OSX. Avid's new support for the Matrox hardware in MC6 opens new possibilities never before offered to Avid editors.

Output HD and SD closed captions to tape

Using the Matrox 4VANC workflow, Avid MC6 users can output to both HD and SD tape with closed captions. First, a closed captions file is created using CPC's MacCaption software. This file is placed on an audio track in the MC6 sequence. Since the video track is not modified, there is no need to render the video. The MXO2 and Mojito hardware internally converts this track into VANC data such as closed captions and AFD. The VANC captions (CEA-708) are output via HD-SDI. Standard definition line 21 (CEA-608) closed captions are also output via SDI and analog outputs.

Up-conversion and Down-conversion with Closed Captioning

Many editors edit in high definition but also need to deliver in standard definition. Usually, down-conversion of the video signal does not preserve the closed captions data. Matrox 4VANC technology's unique workflow ensures that the closed caption data is also down-converted to standard definition line 21 captions. This avoids having to create an SD sequence on the Avid to print to SD tape with closed captions. Standard definition sequences can also be up-converted to HD. As of November 2011, this feature is unique to the Matrox MXO2 and Mojito hardware amongst other available video editing I/O hardware.

Monitoring closed captioning on a standard definition television

HD closed captions are only carried in HD-SDI (not HDMI or component), and normally requires professional equipment in order to monitor the CEA-708 closed captions. The Matrox 4VANC down-conversion technology provides a simpler way to monitor the closed captions output, using an inexpensive consumer TV or monitor with a SD closed captions decoder.

Capturing closed captioning from HD-SDI signals

When ingesting material via the Matrox hardware, the VANC data is preserved using an extra audio track. This track can be decoded by MacCaption, allowing you to convert previously captioned HD and SD videos into other formats, such as for web and mobile devices, without losing the closed captions.

Support for V-Chip, XDS, and AFD

In addition to closed captions, the Matrox 4VANC workflow also allows the insertion of V-chip ratings, XDS (Extended Data Services) into VANC or VBI, and AFD (Active Format Description) into VANC.

Creating and editing 4VANC closed captions track

Matrox worked together with CPC to create a robust HD and SD closed captioning workflow. CPC's MacCaption software can create Matrox 4VANC closed captions, convert other closed caption files into 4VANC format, and convert 4VANC closed captions ingested from tape into other formats, for example for web and mobile device closed captions, or Blu-ray & DVD subtitles.

Contact

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