Audio Processing

The 8415 is an eight-channel sub module for use with the Avenue 7500, 7900 Series, 8400, and 8500 Video Processing Frame Syncs. The 8415's flexible architecture addresses a wide range of audio handling needs. All audio processing is performed at full 24 bit resolution by a digital signal processor (DSP).

Mix, Swap and Shuffle

The 8415 is a full-featured, eight-channel audio mixer. With built-in disembedding from the SDI input of the Video Processor, and four AES I/O ports, the 8415 can handle any digital audio requirement. It provides precise control over audio level, with up to 12 dB of gain to compensate for low level sources. The channel swap and shuffle capability allows you to completely rearrange and remix audio channels. Because the 8415 has simultaneous disembedding and embedding, it is an in-line processor for embedded audio. It can take embedded content, adjust levels and remap channels, and deliver it to the output as an embedded signal.

Lip Sync Preservation

The 8415 has been designed to provide superior handling of embedded audio. The disembedder on the input side follows the timing of the video input, even if that input is asynchronous to the house reference. The embedder on the output side is synchronous to house. This allows embedded audio to be safely bypassed around the video framestore with lip sync properly preserved.

Automatic Gain Control Option

The 9670 Audio Automatic Gain Control software key can be added as an option. This option provides control for keeping audio levels consistent in program material.

Features

- **8 channel audio processing**
- **AES I/O**
- **24 bit audio processing**
- **Embedded Audio Input (Eight Channels)**
- **Embedded Audio-Friendly Synchronization**
- **Resynchronize embedded audio content**
- **Fully adjustable audio levels**
- **Automatic Gain Control Option**
- **Complete shuffling and mixing among all channels**
- **Mix, shuffle, adjust levels of embedded audio**
- **Phase inversion selectable on a channel basis**
- **Tracking Audio Delay**
- **User-adjustable Bulk Audio Delay**
- **Automatic Gain Control option**
- **Built-in tone generator**
- **100 MHz DSP**
- **Use with 7500, 7900 Series, 8400 and 8500**