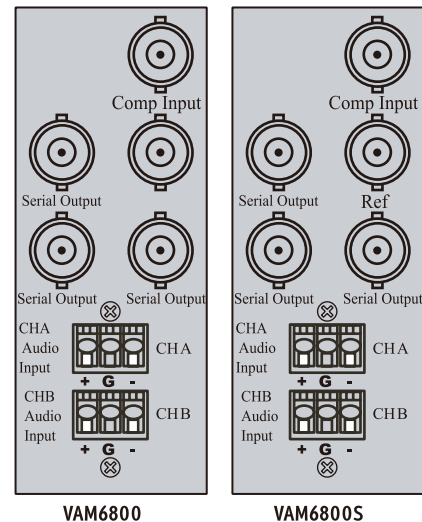
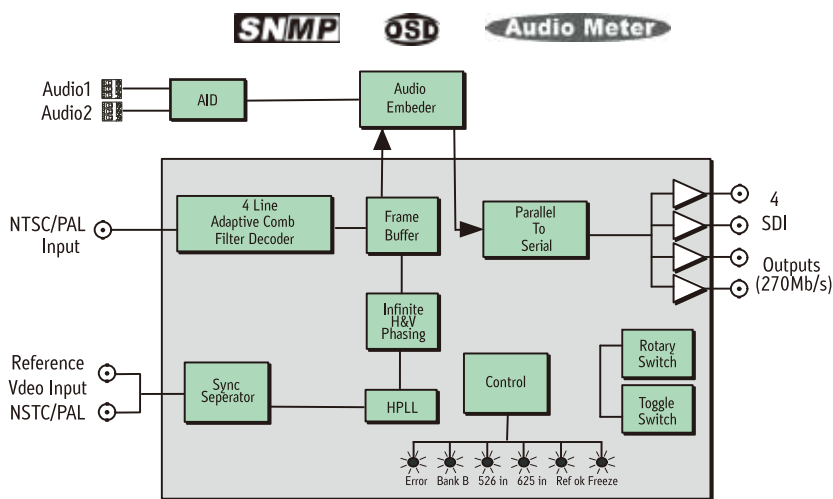


# VAM6800/VAM6800S

## Broadcast Quality A/D and Audio Embedder

The VAM6800/VAM6800S is a decoder and an audio embedder with broadcast quality. It can convert analog composite NTSC/PAL and analog audio into an SD-SDI component with embedded audio. It applies to the occasions that require converting analog composite video and audio into SD-SDI component with embedded audio in the playout and master control room. Irrespective of the type of signal, 12-bit decoding can ensure the better quality of output. The 4x oversampling and jitter removal can guarantee a high accuracy of the output. The VAM6800/VAM6800S adopts the advanced circuit design, featuring low power dissipation. In addition, the VAM6800 boasts that the VAM6800/VAM6800S alone can achieve all the functions that used to be done by 3 modules, showing high superiority in terms of its performance against price. The VAM6800/VAM6800S can output three SDI (SMPTE-259M) component simultaneously and provides easy controls of the settings on the card-edge.



### Features

- Auto-sensing input mode
- Advanced decoding and 12-bit AD conversion

- Better frequency response, high S/N ratio and low distortion
- Embedded audio group selectable
- Built-in frame synchronizer (only applicable to VAM6800S)
- Adjustable audio delay

### Specifications

#### Analog Video Input

Standard: NTSC or PAL  
 Level: 1Vp-p  
 Connector: BNC(IEC169-8)  
 Input Impedance: 75 ohm  
 Input Return Loss: >40dB to 5MHz

#### Analog Video Processing

Gain Range: +/- 3dB

#### Digital Video Processing

Input: 12 bit quantization  
 Oversampling: 4x  
 Comb Filtering: 4-line adaptive

#### Analog Audio Input

Number of Inputs: 2  
 Sampling: 48KHz  
 Connector: 3-pin connector  
 Maximum Input Level: 24 dB @ full level (balanced)  
 Maximum Adjustable Range: 16 to 24 dBu  
 Input Impedance: >30 Kohms  
 THD+N: -95dB, 20-20KHz@ -3dBFS  
 Frequency Response: 20 Hz - 20 kHz: 0 ±0.15 dB  
 Crosstalk: 90dB(20-20KHz)

#### Sync Signal

Signal Type: NTSC or PAL composite video  
 Number of Inputs: 1  
 Accuracy: 37ns steps  
 Range: Infinite

#### Digital Video Output

SDI Output: 3  
 Signal: SMPTE259M-C;270Mb/s;525/625  
 Embedded Audio: SMPTE272M-A  
 Connector: BNC(IEC169-8)  
 Output Impedance: 75 ohm  
 Output Return Loss: >18dB to 270MHz  
 Output Signal Level: 800mV+/-10%  
 DC Offset: 0V +/-0.5V  
 Rise and Fall Time: 0.7 to 1ns (20% to 80% of amplitude)  
 Overshoot: <10% of amplitude(all output terminated)  
 Jitter: <0.2UI (740PS)

#### Power Consumption

Power: 3.2W  
 Positive Rail: 450mA  
 Negative Rail: 30mA

\*Specifications are subject to change without notice.

### Ordering Information

#### VAM6800

Analog video decoder and audio embedder

#### VAM6800S

Analog video decoder and audio embedder with frame synchronizer