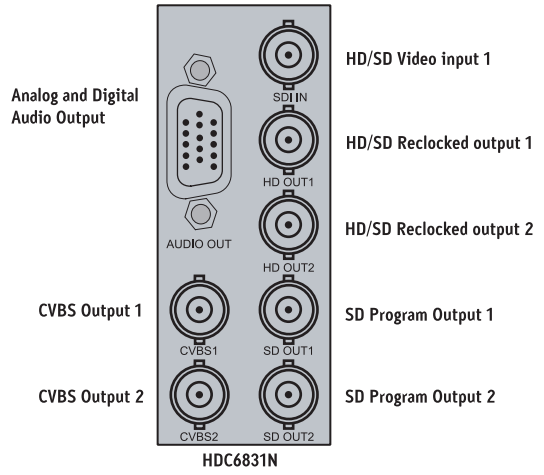
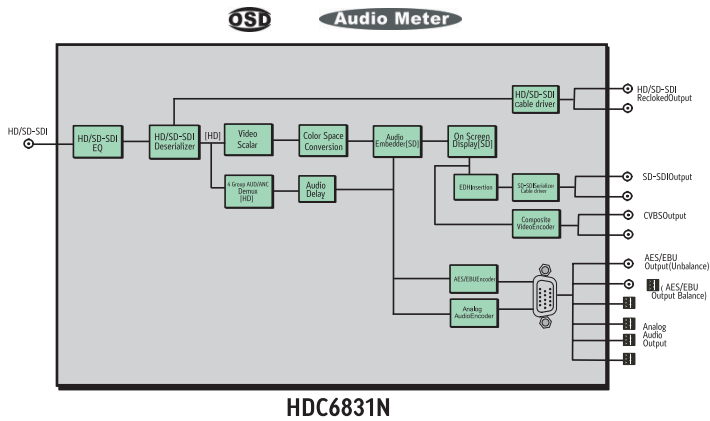


HDC6831N

HD/SD Down Converter/De-embedder/Video&Audio Monitoring Module

The HDC6831N is an HD-SDI down converter de-embedding audio from an HD-SDI and a SD-SDI signal. The module supports signal conversion from an HD-SDI to a SD-SDI, an HD-SDI to analog composite video, and also from a SD-SDI to analog composite video. When the module de-embeds from an HD-SDI and a SD-SDI, it provides 2 pairs of AES/EBU outputs and 4 channels of analog audio outputs. The HDC6831N supports OSD, time code, video format display and 8 channels of audio metering display.



Features

- Auto sensing HD-SDI/SD-SDI input
- Support 1080I, 1080P, 720P, 1035I, 576I, 480I format conversion
- 2 channels of reclocked HD/SD-SDI loop outputs
- 2ch down-converted SD-SDI output (for HD-SDI input) or 2ch SD-SDI output without down-converted (for SD-SDI input)
- 2 channels of CVBS outputs

- The user can overlay OSD menu, input/output format, audio level meter and time code to the SD-SDI/CVBS output
- HD to SD color space conversion
- Re-insert all audio into SD-SDI output
- Re-insert EDH into SD-SDI output
- De-embedding audio and providing 2 pairs of AES/EBU outputs (balanced or unbalanced can be set), and four channels of balanced analog audio outputs

Specifications

SDI Video Input

Number of Inputs: 1
 Standards: SMPTE 292M HD-SDI or 259M SD-SDI coaxial cable signal
 Connector: BNC (IEC169-8)
 Impedance: 75 ohm
 Return Loss: HD-SDI: >18dB 5MHz to 1485MHz
 SD-SDI: >18dB to 270MHz
 Equalization: HD-SDI: 120m Belden 1694A Cable
 SD-SDI: 230m Belden 8281 Cable

SDI Video Output

Number of Outputs: 2
 Standards: 259M SD-SDI coaxial cable signal
 Connector: BNC(IEC 169-8)
 Impedance: 75 ohm
 Return Loss: HD-SDI>18dB 5MHz to 1485MHz
 SD-SDI>18dB to 270MHz
 Signal Level: 800mV±10%
 DC Offset: 0 V ± 0.5
 Rise and Fall Time: HD-SDI: <270ps
 SD-SDI: 400-1500ps (20%~80% of amplitude)
 Overshoot: <10%
 Jitter: <0.2UI (740ps) peak to peak

Analog Composite Video Output

Standards: NTSC, PAL
 Level: 1Vp-p +/-3dB
 Connector: BNC (IEC169-8)
 Impedance: 75Ω
 Return Loss: >40dB to 5MHz
 DC Offset: 0V±0.05 V
 Frequency Response: +/-0.5dB to 5MHz
 Differential Gain: <1.5%
 Differential Phase: 1.5°
 S/N Ratio: 58dB to 5.75MHz

Balanced AES Output

Number of Outputs: 2
 Signal Format: Balanced AES
 Connector: DB9
 Impedance: 110Ω±20%(0.1 to 6MHz)
 Signal Level: 2 to 7V peak
 Sampling Rate: 48KHz
 Jitter: ±20ns
 Rise and Fall Time: 5 to 30 ns(10% to 90% of amplitude)
 Bit: 20

SDI Video Loop Out

Number of Outputs: 2
 Standards: SMPTE 292M HD-SDI or 259M SD-SDI coaxial cable signal
 Connector: BNC (IEC169-8)
 Impedance: 75 ohm
 Return Loss: HD-SDI >18dB 5MHz to 1485MHz
 SD-SDI >18dB to 270MHz
 Signal Level: 800mV±10%
 DC Offset: 0V±0.5V
 Rise and Fall Time: HD-SDI: <270ps
 SD-SDI: 400-1500ps (20%~80% of amplitude)
 Overshoot: < 10%
 Jitter : <0.2UI (740ps) peak to peak

Unbalanced AES Output

Number of Outputs: 2
 Signal Format: Unbalanced AES
 Connector: DB15
 Impedance: 75Ω
 Signal Level: 1V peak ±10%
 Sampling Rate: 48KHz
 Return Loss: >25dB, 0.1to 6MHz
 Rise and Fall Time: 30 to 44 ns(10% to 90% of amplitude)
 Bit: 20

Analog Audio Output

Number of Outputs: 4
 Standards: Balanced Analog
 Connector: DB15
 Impedance: 66Ω
 THD: +N 0.004% @ 1 kHz 0 dBFS
 S/N Ratio: >107dB
 Return Loss: >25dB, 0.1 to 6MHz
 Frequency Response: 20 Hz - 20 kHz: 0 ±0.15 dB

Power Consumption

Power: 3.5W
 Positive Rail: 600 mA
 Negative Rail: 10 mA

**Specifications are subject to change without notice.*

Ordering Information

HDC6831N

HD-SDI downconverter/de-embedder/video & audio monitoring module