A SIMPLE AND EFFECTIVE UHD 12G-SDI AUDIO SOLUTION

AMX-8952 is a key building block that solves audio embedding and synchronization problems in HD-SDI and UHD 12G-SDI environments. This enables your infrastructure to support the next generation of high-quality production with technology that is scalable, easy to deploy, and highly reliable.

AMX is an openGear card that supports the latest UHD 12G-SDI technology. The AMX-8952 family consists of three variants that support either unbalanced AES, balanced AES or analog audio interfaces. The audio interfaces are bi-directional, so one card is your embedder or de-embedder, making it easy to deploy wherever you need it.

The card features useful audio processing such as audio shuffling and per-channel gain and delay, which enables you to make critical corrections to incoming feeds. An optional Frame Synchronizer provides synchronization and adjustable video delay.

AMX also offers a secondary 12G-SDI input, allowing for clean/quiet switching triggered manually or by loss-of-signal detection. This is a great solution for signal path protection switching.

Full control and monitoring of the card are available via the DashBoard control system, which makes it easy to integrate AMX-8952 into your facility’s centralized control scheme.

**EMBED IN UHD**
A key building block in any SDI facility, AMX allows you to embed and de-embed audio into HD and UHD SDI workflows. We make it easy to marry your audio workflow with your video production.

**SYNCHRONIZE IN UHD**
Take advantage of the remote feeds offered by AMX. The optional Frame Synchronizer with video delay makes AMX a great edge device for your mobile or studio installation.

**SWITCH IN UHD**
With primary and backup inputs, AMX provides clean/quiet switching wherever you need it. Additionally, ensure your critical paths are protected with loss-of-signal failover.
AMX-8952 bridges separate audio and video production islands through embedding and de-embedding for up to 16 channels of AES audio or 8 channels of analog audio, which is ideal for incoming and outgoing feeds. When combined with the optional Frame Synchronizer, this makes for a great gateway to your facility or mobile.

When utilizing the secondary input, the AMX-8952 can provide clean/quiet switching between paths. With loss-of-signal detection, the AMX-8952 can automatically fail over to a backup signal path. This can easily be controlled via DashBoard, RossTalk, or GPI with status monitoring via DashBoard or SNMP.
**GENERAL**

**Video Interface:**
- HD-BNC: 1 in, 1 out, 1 bidirectional
- SDI: (SMPTE ST 274)
- 3G-SDI: (SMPTE ST 424)
- 12G-SDI: (SMPTE ST-2081-1)

**Standards:**
- HD-SDI (SMPTE ST 274)
- 3G-SDI (SMPTE ST 424)
- 12G-SDI (SMPTE ST-2081-1)

**Format Support:**
- 720p 50/59.94
- 1080i 50/59.94
- 1080p 23.98/25/29.97/50/59.94
- 2160p 50/59.94

**Video Delay:**
- HD/3G: 0 – 160 frames
- UHD: 0 – 40 frames

**Reference:** via openGear frame

**Power Consumption:** 20W

**SDI Inputs**

- Cable Length (Belden 1694a):
  - HD-SDI: 150m
  - 3G-SDI: 120m
  - 12G-SDI: 50m

**Input Return Loss:**
- >15dB to 1.5GHz
- >10dB to 3GHz
- >4dB to 12GHz

**Impedance:** 75Ω

**SDI Outputs**

- Output Return Loss:
  - >15dB to 1.5GHz
  - >10dB to 3GHz
  - >4dB to 12GHz

- Rise/fall Time:
  - <270ps @ 1.485Gbps
  - <135ps @ 2.97Gbps
  - <45ps @ 11.88Gbps

- Alignment Jitter:
  - 1.485Gbps: <0.2 UI
  - 2.97Gbps: <0.3 UI
  - 11.88Gbps: <0.3 UI

- Output Level: 800mV ± 10%
- DC Offset: 0V ± 50mV
- Overshoot:
  - <10% @ 1.485 Gbps
  - <10% @ 2.97 Gbps
  - <15% @ 11.88Gbps

**AES I/O (AMX-8952-A)**

- Physical: 8 bidirectional HD-BNC
- Standards: AES3id-2001

**AES Inputs**
- Impedance: 75Ω
- Input Level: 50mV – 2.5V p-p @ 48kHz
- Sampling Rate: 32kHz – 96kHz
- Minimum Audio Delay: 0.37ms
- Cable Length: 800m @ 48kHz

**AES Outputs**
- Impedance: 75Ω
- Input Level: 1V p-p
- Sampling Rate: 48kHz

**AES Outputs (AMX-8952-B)**

- Physical: 8 bidirectional WECO
- Standards: AES-3id-2001

- Impedance: 110Ω
- Input Level: 100mV – 10V p-p @ 48kHz
- Sampling Rate: 32kHz – 96kHz
- Minimum Audio Delay: 0.37ms
- Cable Length: 450m @ 48kHz

**AES Outputs (AMX-8952-UHD-LICENSE)**

- Impedance: 110Ω
- Input Level: 4V p-p
- Sampling Rate: 48kHz

**ANALOG I/O (AMX-8952-C)**

- Physical: 8 bidirectional WECO
- Sampling Rate: 48kHz

**Analog Inputs**
- Impedance: >12kΩ
- Maximum Input Level: +24dBu
- Frequency Response: ±0.1dB 20Hz – 20kHz
- Signal-to-noise Ratio: -98dBA
- THD: <-90dB (0.003%)
- Crosstalk: <-95dB
- Amplitude Linearity: <-0.6dB @ -100dBFS

**Analog Outputs**
- Maximum Output Level: +24dBu
- Frequency Response: ±0.1dB 20Hz – 20kHz
- THD: <-90dB (0.003%)
- Crosstalk: <-80dB 20Hz-20kHz
- Amplitude Linearity: <-0.5dB @ -100dBFS

*Specifications subject to change without notice.*