

UDC-4240

Dual Channel 12G-SDI
Up/Down/Cross Converter with
Audio I/O

2024 Datasheet

The **UDC-4240** is a reliable and versatile dual-channel 12G/6G/3G/HD/SD-SDI format converter. It offers two independent processing paths for frame synchronization, and can apply delays of up to 50 frames. Additionally, it includes two slots for optional audio input and output modules.

The audio shuffling and processing capabilities are highly convenient and flexible, thanks to the built-in crosspoint. This feature allows users to embed external audio channels into SDI inputs, route audio outputs from embedded audio simultaneously, and shuffle audio within an SDI input or between two SDI inputs. The audio processor core can delay audio pairs by up to 10 seconds and apply the desired gain.

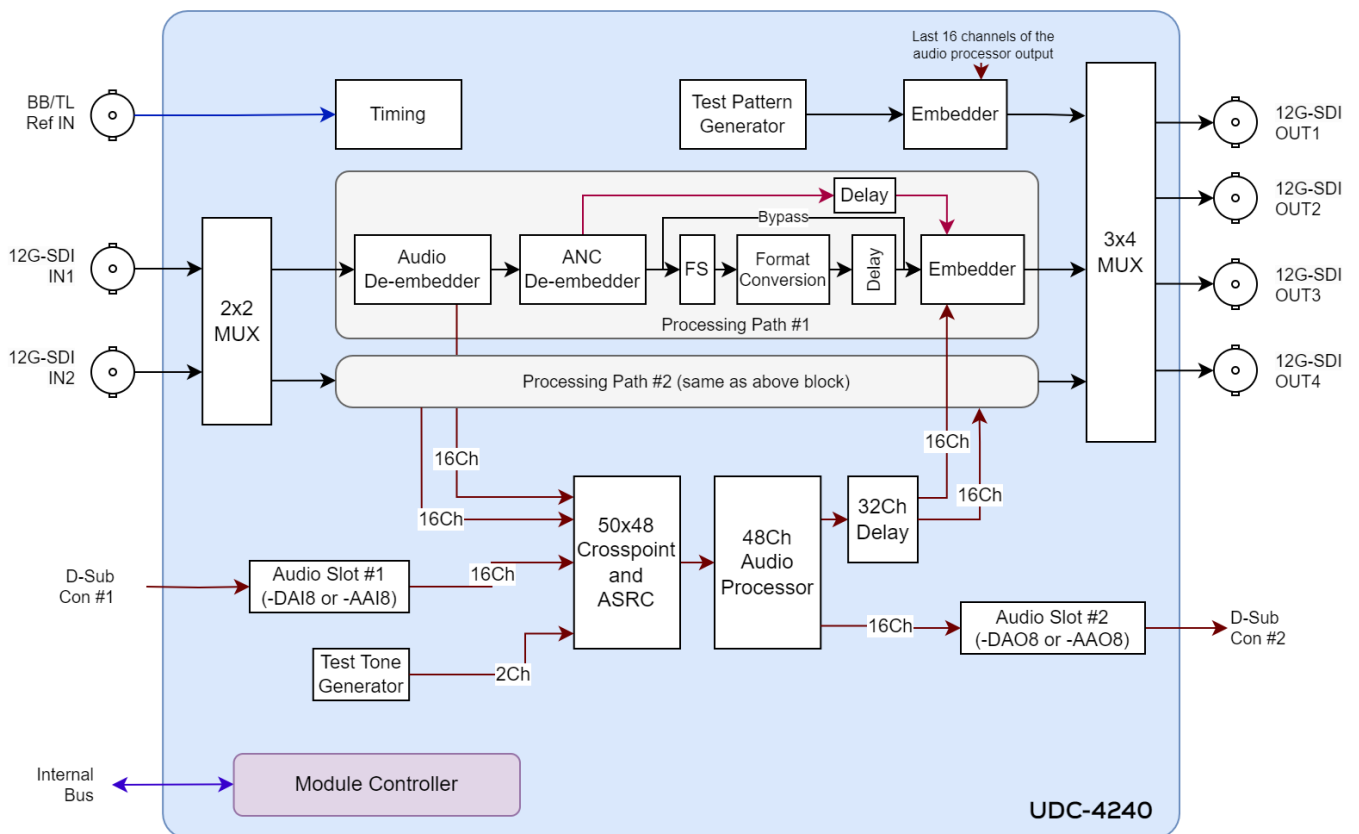
The **UDC-4240** also supports ancillary data pass-through and conversion (including ST352, SCTE104, Time Code, HDR, OP42, OP47, AFD), timing adjustments, and an internal test tone / pattern generator. Optionally it can apply 3D-LUT transformations for HDR workflows. Control and monitoring are facilitated through the user-friendly web-based interface and the frame's front control panel.

Key Features

- High quality 12G/6G/3G/HD/SD up/down/cross converter
- Aspect Ratio Conversion respect to AFD metadata and AFD generation
- Advanced video de-interlacing
- Independant dual channel operation
- Eight pair audio embedder and de-embedder
- Up to x16 AES inputs or outputs
- Frame synchronizer with tri-level or bi-level reference input
- Horizontal and vertical timing adjustment respect to reference input
- Auto freeze, black, last frame, or pattern on input video loss
- Internal pattern and test tone generator
- Channel-wise built-in audio crosspoint

- Audio delayer: Up to 10 seconds (1ms steps)
- Video delayer: Up to 50 frames
- Easy configuration via web-based user interface
- Firmware Remote Upgrade
- Input and output configurable MUX to ease changes in cabling
- Two audio I/O slots
- Ancillary data transparency

Block Diagram



System Requirements

Type	Product	Description
Frame	SRM-0655	3RU Frame with Controller

Ordering Information

Product	Description	Type
UDC-4240	Dual Channel 12G-SDI Up/Down/Cross Converter with Audio I/O	Main Board
UDC-4240-3DRP	Double Slot Back-panel for UDC-4240 (compatible with SRM-0655)	Back-panel
MOD-APP4K-DAI8	8-Channel Digital Stereo Audio Input Module	Option for Audio I/O Slot #1
MOD-APP4K-DAO8	8-Channel Digital Stereo Audio Output Module	Option for Audio I/O Slot #2
MOD-APP4K-AAI8	8-Channel Analog Mono Audio Input Module	Option for Audio I/O Slot #1
MOD-APP4K-AAO8	8-Channel Analog Mono Audio Output Module	Option for Audio I/O Slot #2

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