

# 7812UDX-AES8-AAV-3G/HD (-F) , 7812UDX-AAV-3G/HD (-F)

## 3G and HD Up/Down/Cross Converters with Analog Video and Audio Input/Outputs and Optional Fiber IO



The 7812UDX-AES8-AAV-HD and 7812UDX-AAV-3G are Broadcast Quality Up/Down/Cross Converters that convert between common SD/SMPTE ST 259 and HD/SMPTE ST 292-1 video signals. -3G versions add support for common 3G/SMPTE 424M video signals. These modules also support analog video and audio inputs/outputs. Advanced 3D adaptive comb filtering technology is utilized when decoding composite analog input video signals to eliminate moving artifacts typically introduced during the decoding process. Twelve (12) bit video ADCs are utilized for superior precision and image quality. The card's composite analog video output is only active only when the output video format is set to be standard definition. These modules support frame synchronization and external genlock inputs (card and frame reference) for video timing adjustments.

The 7812UDX series incorporates Mosquito Noise Reduction (MNR) and Block Artifact Reduction (BAR) in addition to motion adaptive spatial-temporal (3D) noise reduction. The 7812UDX series also incorporates new de-interlacing technologies for superior resolution and artifact reduction.

The 7812UDX series supports broadcast quality scaling and offers both standard and user defined ARC modes. AFD (SMPTE 2016) based steering of ARC modes and stamping AFD codes is fully supported. Transitions between AFD modes are frame accurate/glitch free. With the +F option, signals applied to PGM B IN can be keyed into image side panels. FILL inputs are frame synchronized so that pre-timing of FILL inputs is not required. With the +CF2G option, static or animated side panels can be stored locally and keyed into image side-panels. Full broadcast quality color correction and detail enhancement processors are integrated in the 7812UDX series. RGB based color legalization is also supported. ITU Rec. 709 C 601 color space conversions are performed as needed.

The 7812UDX series supports 16 channels of embedded audio with audio delay automatically matching video delay. Additional audio delay is available. Four analog audio inputs and four analog audio outputs are supported with independent audio routing for analog audio outputs. Full audio proc is supported including per channel audio gain, channel swapping and inversion controls. Surround sound to stereo (Lt/Rt or Lo/Ro) down-mixing is supported as a standard feature.

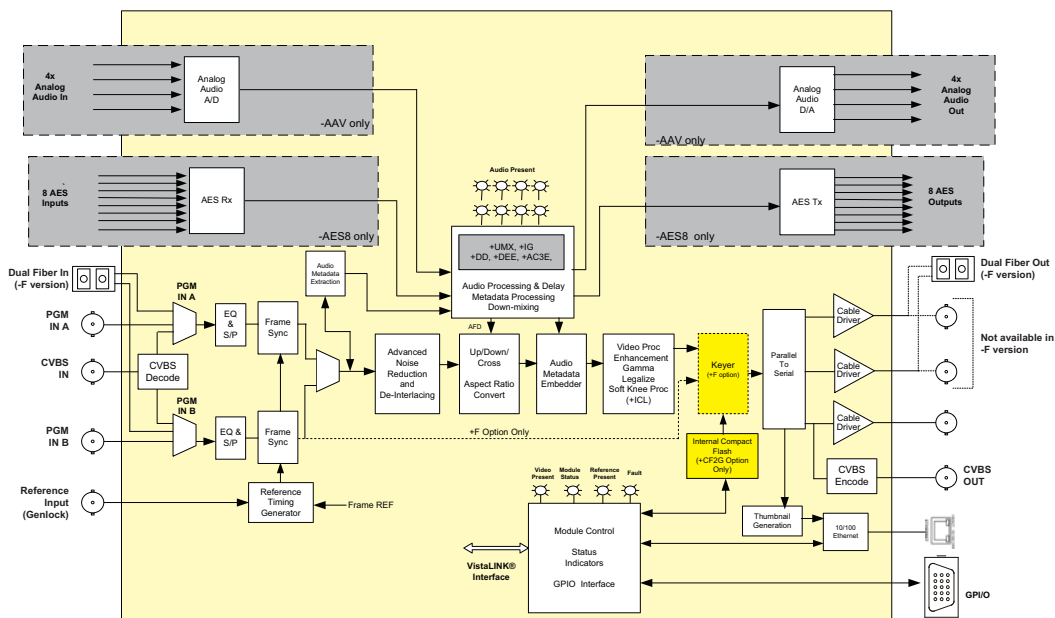
With -AES8 variants, 8 x discrete AES inputs and outputs are supported in addition to advanced audio processes like stereo to 5.1 up-mixing (+UMX), Dolby® E/ACAC-3 Decoding (+DD), Dolby® E Encoding (+DEE), Dolby® AC-3 Encoding (+AC3E) and IntelliGain Loudness Management (+IG). Any two Dolby® encode or decode functions may be integrated into a single card including dual decoders or dual encoders.

These modules transfer closed caption and time information from input to output performing all HD ↔ SD data translations and time code re-calculations. SFP based fiber inputs and outputs can be supported with the -F variants (SFP modules ordered as separate accessories)

These modules are SNMP and VistaLINK® capable when used with a 7700FC VistaLINK® Frame Controller module in slot 1 of the 7800FR frame. Any Evertz control panel (ie. CP2232E) or VUE product may also control these modules via SNMP when used in conjunction with a 7700FC.

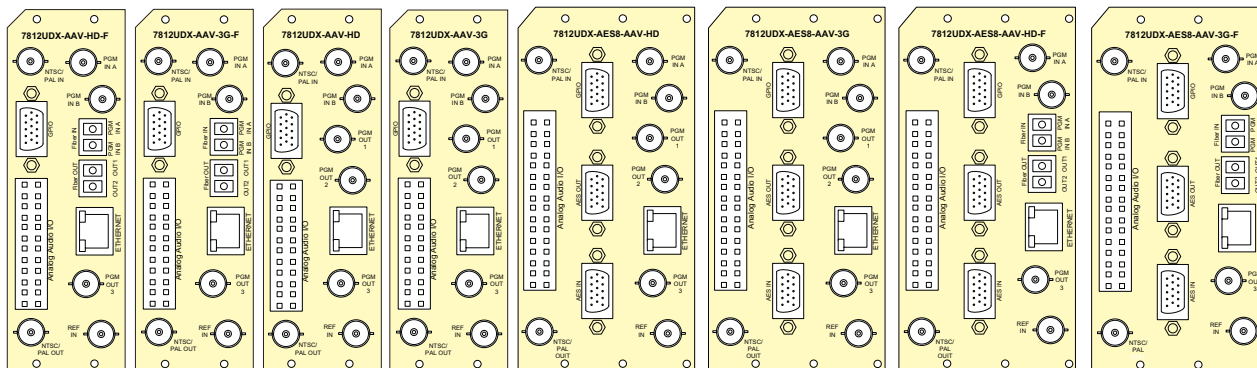
### Features & Benefits

- Broadcast quality up/down/cross conversions between common SD/SMPTE ST 259 and HD/SMPTE ST 292-1 video signals
- Support for common 3G/SMPTE 424M video signals (-3G versions)
- Integrated frame synchronization capabilities
- Support for analog video and analog audio input/outputs
- Support for card reference and 7800FR frame reference
- Advanced noise reduction technologies (3D NR, MNR, BAR)
- New generation de-interlacing technologies
- Supports standard and user defined aspect ratio conversions
- Fully AFD enabled with frame accurate transitions between AFD modes
- Integrated side panel fill keyer (+F)
- Optional compact flash for storage of side-panel content (+CF2G)
- Broadcast quality color corrector and detail enhancement engines
- ITU Rec 709 C601 color space conversions
- "Soft Knee" color legalization (+ICL)
- 16 channel embedded audio support
- Audio delay automatically tracks video delay
- Full audio proc and channel swapping
- 5.1 surround sound to stereo (Lt/Rt and Lo/Ro) down-mixing
- Support for 4 x analog audio inputs and 4x analog audio outputs
- Supports 8 x external AES inputs and 8 x AES outputs (-AES8 only)
- Optional stereo to 5.1 surround sound up-mixer (+UMX on -AES8 only)
- Optional Dolby® E/AC-AC-3 decoder (+DD on -AES8 only)
- Optional Dolby® E encoder (+DEE on -AES8 only)
- Optional Dolby® AC-3 encoder (+AC3E on -AES8 only)
- Optional IntelliGain Loudness Management (+IG on -AES8 only)
- Transfer closed caption and time information from input to output performing all HD ↔ SD data translations and time code re-calculations.
- Dual fiber in and dual fiber out using SFP modules (-F versions)
- SFP modules ordered as separate accessories
- SNMP and VistaLINK® capable when used with a 7700FC VistaLINK® Frame Controller module in slot 1 of the 7800FR frame



# 7812UDX-AES8-AAV-3G/HD (-F) , 7812UDX-AAV-3G/HD (-F)

3G and HD Up/Down/Cross Converters with Analog Video and Audio Input/Outputs and Optional Fiber I/O



## Ordering Information

### Coax I/O:

- 7812UDX-AAV-HD HD** Up/Down/Cross Converter with Analog Video/Audio Inputs/Outputs
- 7812UDX-AES8-AAV-HD HD** Up/Down/Cross Converter with AES I/O and Analog Video/Audio Inputs/Outputs
- 7812UDX-AAV-3G HD** Up/Down/Cross Converter with Analog Video/Audio Inputs/Outputs
- 7812UDX-AES8-AAV-3G** HD Up/Down/Cross Converter with AES I/O and Analog Video/Audio Inputs/Outputs

### Fiber I/O Enabled:

- 7812UDX-AAV-HD-F HD** Up/Down/Cross Converter with Analog Video/Audio Inputs/Outputs
- 7812UDX-AES8-AAV-HD-F HD** Up/Down/Cross Converter with AES I/O and Analog Video/Audio Inputs/Outputs
- 7812UDX-AAV-3G-F HD** Up/Down/Cross Converter with Analog Video/Audio Inputs/Outputs
- 7812UDX-AES8-AAV-3G-F HD** Up/Down/Cross Converter with AES I/O and Analog Video/Audio Inputs/Outputs

### Ordering Options

- +F
- +CF2G
- +ICL
- +UMX
- +IG
- +DD
- +DEE
- +AC3E
- +DD2
- +DEE2
- +DAC32

### Accessories

- SFP3T13-2
- SFP3R-2

Rear Plate must be specified at time of order (Eg. +3RU)

- Side Panel Fill
- Embedded Compact Flash
- Soft Knee Color Legalizer
- Stereo to 5.1 Up-mix (-AES8 version only)
- IntelliGain Loudness Management (+IG) (-AES8 version only)
- Dolby E/AC3 Decoder (-AES8 version only)
- Dolby E Encoder (-AES8 version only)
- Dolby AC3 Encoder (-AES8 version only)
- Second Dolby E/AC3 Decoders (-AES8 version only)
- Second Dolby E Encoders (-AES8 version only)
- Second AC3 Encoders (-AES8 version only)

Dual optical 3G/HD/SD-SDI SFP Transmitter, 1310 nm  
Dual optical 3G/HD/SD-SDI SFP Receiver