

AJA FS4 4-Channel 12G-SDI/1-Channel UHD 4K Frame Synchronizer/Converter

Modes of Operation	Four independent 2K, HD, or SD video processors One 4K, UltraHD, 2K, HD, or SD video processor
Video Formats	(4K) 4096 x 2160p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60 (UltraHD) 3840 x 2160p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60 (2K) 2048 x 1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60 (HD) 1920 x 1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60 (HD) 1920 x 1080PsF 23.98, 24, 25, 29.97, 30 (HD) 1920 x 1080i 50, 59.94, 60 (HD) 1280 x 720p 50, 59.94, 60 (SD) 525i 59.94 (SD) 625i 50 YCbCr, 4:2:2, 10-bit
Video Input Digital	4 x 3G-SDI inputs, 4 x BNC 4 x 3G-SDI inputs, 4 x Fiber or HD-BNC (optional SFP modules) SFP fiber modules, 3G-SDI, dual LC, single LC, or single SC, SMPTE-297 SFP fiber module, 12G/6G-SDI, dual LC, SMPTE-297 SFP coax module, 12G/6G-SDI, dual HD-BNC 12G/6G/3G/HD/SD, SMPTE-259/292/424/2081/2082 Single Link 12G/6G-SDI (with optional SFP module) Quad Link 3G-SDI Level A or B-DL (4 x 3G), SMPTE-425-5 Dual Link 3G-SDI Level B-DS (2 x 3G), SMPTE-425-3 Single Link 3G-SDI Level A, B-DL, or B-DS, SMPTE 425 Quad Link HD-SDI (4 x 1.5G) Dual Link HD-SDI (2 x 1.5G), SMPTE-372 Single Link HD/SD Quadrant (Square Division) or 2SI (Two Sample Interleave) 4K/UltraHD input pixel mapping 8 x 1 selector feeds video processors
Video Output Digital	4 X 3G-SDI outputs, 4 x BNC 4 x 3G-SDI outputs, 4 x fiber or HD-BNC (optional SFP modules) SFP fiber modules, 3G-SDI, Dual LC, Dual LC CWDM, Single LC, or Single SC, SMPTE-297 SFP fiber module, 12G/6G-SDI, dual LC, SMPTE-297 SFP coax module, 12G/6G-SDI, dual HD-BNC 12G/6G/3G/HD/SD, SMPTE-259/292/424/2081/2082 Single Link 12G/6G-SDI (with optional SFP module) Quad Link 3G-SDI Level A or B-DL (4 x 3G), SMPTE-425-5 Dual Link 3G-SDI Level B-DS (2 x 3G), SMPTE-425-3 Single Link 3G-SDI Level A, B-DL, or B-DS, SMPTE 425 Quad Link HD-SDI (4 x 1.5G) Dual Link HD-SDI (2 x 1.5G), SMPTE-372 Single Link HD/SD Quadrant (Square Division) or 2SI (Two Sample Interleave) 4K/UltraHD output pixel mapping
Monitor Output	1 x BNC, 1 x 3G-SDI output 3G-SDI/HD/SD, SMPTE-259/292/424, 10-bits 1 x HDMI, 1 x HD output 2K/HD/SD, HDMI v1.4a Monitored Video Processor output (video and audio) is simultaneously output on both connectors 4K/UltraHD down-converted to 2K/HD Crop control on HDMI output
Video Processing	Motion adaptive deinterlacer Proc amp controls Color corrector Legalizer Framerate conversion/film cadence removal/insertion (3:2, 1:2, 2:1, 2:3) Adjustable delay 0-6 frames with H and V timing controls Closed Caption conversion (CEA-608/CEA-708) AFD input detection, down-convert control, and output pass through or overwrite Freeze (manual or on input signal loss) to black or last good frame Matte generator for background fill Video test generator Nominal video delay 4K/UltraHD, 3 frames (LFR), 6 frames (HFR) HD/SD, 2 frames (LFR), 4 frames (HFR)

Format Conversion	Convert any supported input format to any supported output format, within the same frame rate family. These three families are: 59.94, 29.97, 23.98 50, 25 60, 30, 24
Scaling	Supported in 2K/HD/SD formats Zoom in and out Reposition Region of Interest (ROI)
Up-Conversion	Hardware 10-bit Zoom 14:9: results in a 4:3 image zoomed slightly to fill a 14:9 image with black side bars Zoom Letterbox: Results in image zoomed to fill fullscreen Zoom Wide: Results in a combination of zoom and horizontal stretch to fill a 16:9 screen; this setting will introduce a small aspect ratio change
Down-Conversion	Hardware 10-bit Anamorphic: fullscreen Letterbox: Image is reduced with black top and bottom added to image area with the aspect ratio preserved Crop: Image is cropped to fit video output format
Aspect Ratio Conversion	SD to SD Letterbox: Transforms SD anamorphic material to a letterboxed image H Crop: Produces a horizontally stretched effect on the image; transforms anamorphic SD to full frame SD Pillarbox: Produces an image in the center of the screen with black borders on the left and right sides and an anamorphized image in the center V Crop: Transforms SD letterbox material to an anamorphic image
Audio Input Digital	48 kHz sample rate 8 x SDI embedded inputs (16-Channels each) 128-Channels, 24-bit (20-bit SD), SMPTE-272/299 8 x balanced AES inputs (16-Channels), 1 x DB-25 16-Channels, 24-bit, AES-3 2 x MADI inputs, 1 BNC, 1 x ST Fiber 128-Channels, 24-bit, AES-10
Audio Output Digital	48 kHz sample rate 1 x SDI embedded output per Video Processor (16-Channels each) 16-Channels (in single Video Processor mode), 24-bit (20-bit SD), SMPTE-272/299 64-Channels (in four Video Processor mode), 24-bit (20-bit SD), SMPTE-272/299 8 x balanced AES outputs (16-Channels), 1 x DB-25 16-Channels, 24-bit, AES-3 2 x MADI outputs, 1 BNC, 1 x ST Fiber 128-Channels, 24-bit, AES-10
Audio Processing	277 x 208 mono audio matrix, route 1 to 1, 1 to many Inputs: 128 embedded, 16 AES, 128 MADI, 2 stereo mixdowns, 3 tone generator Outputs: 64 embedded, 16 AES, 128 MADI Input adjustment controls for each channel Gain +18 to -18 dB in 0.5 dB steps Phase invert Input adjustment controls for each channel pair Delay -16ms to +1sec in 20.8 us steps Two independent 5.1 or 7.1 to stereo mixdown processors with gain adjust High quality Sample Rate Conversion on all audio inputs SRC bypass for non-PCM audio (e.g. Dolby E, AC-3, etc) Audio tone generator (mute, 400 Hz, 1 kHz)
Reference Input	External, 2 x BNC Looping, nonterminating Blackburst or tri-level sync
Genlock	Lock to External Reference Lock to SDI input 1 thru 8 Free run based on Temperature Compensated Crystal Oscillator
Network Interface	1 x RJ-45, 10/100/1000 Ethernet Embedded web server for remote control SNMP
Front Panel	Display Keypad with status LEDs Two rotary/push knobs Comprehensive alarm indicators

Presets	Each mode supports 40 Presets
GPI	1 x 25-pin D-Connector Four optically isolated GPI inputs Four optically isolated GPO outputs
Power	100 to 240 VAC 50/60 Hz (Dual, redundant power supplies), 55 W typical; 70 W maximum
Environment	Operating Temperature: 32 to 104°F (0 to 40°C) Storage Temperature: -40 to 140°F (-40 to 60°C) Operating Relative Humidity: 10 to 90%, non-condensing Operating Altitude: <10,000' (<3,000 m)
Dimensions (W x D x H)	17.5 x 16 x 1.75" (1RU) (44.4 x 41 x 4.45 cm)
Weight	7 lb (3.2 kg)